

CARE California Carpet Stewardship Program Annual Report

January 2016 – December 2016



**California
Carpet
Stewardship
Program**

An initiative of CARE:
Carpet America Recovery Effort

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1 Contact Information – Section 18944(1)

Statutory Citation

(a) The annual report must contain the following:

Contact information. Identify the manufacturer or stewardship organization responsible for the annual report submittal.

The Carpet America Recovery Effort (CARE) serves as the legislatively designated California Carpet Stewardship Organization (CSO) responsible for annual report submittal under the California Carpet Stewardship Program (Program). As the CSO, CARE is responsible for implementing the Program in compliance with AB 2398 and the approved Stewardship Plan, with regulatory oversight by CalRecycle. **Carpet America Recovery Effort (CARE)** is a 501(c)(3) organization that began in 2002 as a result of a Memorandum of Understanding (MOU) for Carpet Stewardship signed by stakeholders, including members of the carpet industry, government representatives, non-government entities (NGOs), and entrepreneurs. The mission of CARE is to advance market-based solutions that increase landfill diversion and recycling of post-consumer carpet, encourage design for recyclability by carpet manufacturers, and support manufacturers in use of recycled materials in secondary products.

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The CARE California Program is open to all carpet mills that make, sell, or distribute carpet products. All carpet manufacturers that ship or sell carpet in California must be covered under an approved Carpet Stewardship Plan. Appendix 10.7 includes a current list of participating carpet mills and their contact information.

2 Executive Summary – Section 18944(2)

Statutory Citation

(2) Executive Summary. Provide an evaluation of the effectiveness of the carpet stewardship plan, and anticipated steps, if needed, to improve performance.

2.1 Introduction

In 2016, the California Carpet Stewardship Program (Program) completed five years of operation. In response to dynamic market conditions and macroeconomic challenges in 2015, the Program adopted a series of changes in late 2015 and early 2016 to contribute to market development including:

- Adjusting subsidies for collections, carpet tile, calcium carbonate, and Tier-2 non-nylon products.
- Incorporating grant funding.
- Expanding collections, marketing, and education and outreach efforts.

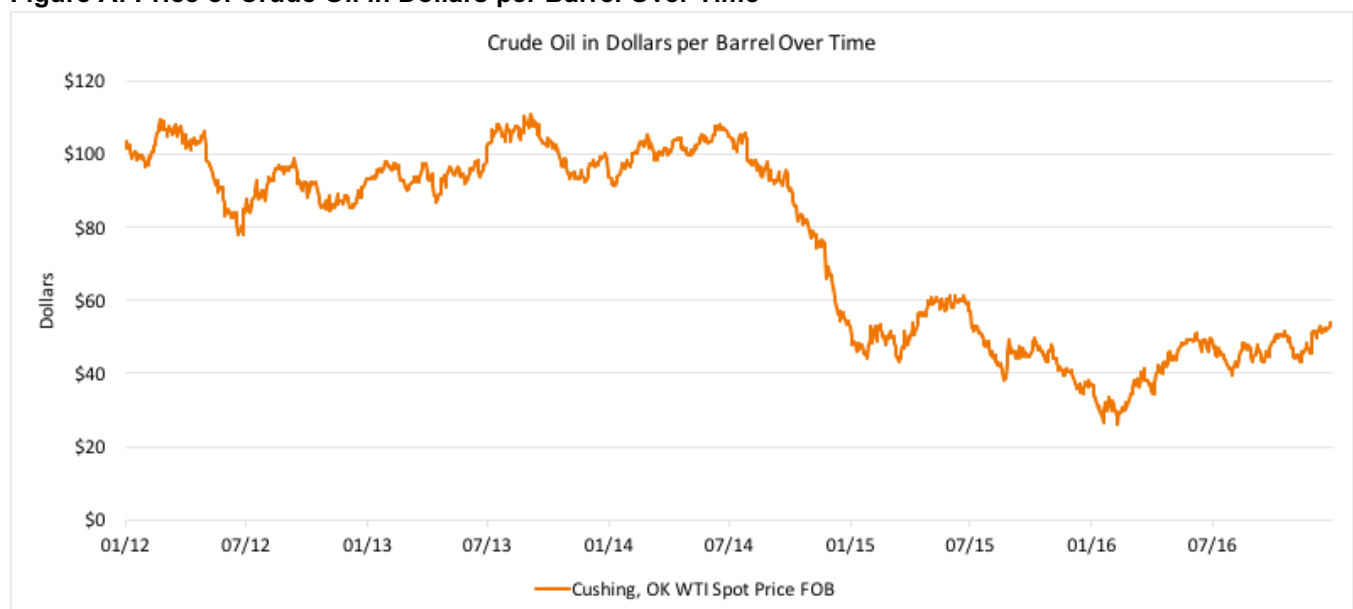
The Program also continued to work to improve gross collection, recycled output, and reuse of California-generated post-consumer carpet (PCC) material, as well as improve carpet's recyclability and increase diversion from California landfills. Emphasis was placed on finding applications for carpet backing filler in an effort to increase recycled output and yields.

2.2 Industry Landscape

This past year, a number of market and microeconomic challenges continued to challenge carpet collection and recycling rates:

- **A drop in prices in global oil markets** continued, hitting a low in the early part of the year (see Figure A). This continued to widen the gap between the cost of virgin materials and recycled output, increasing the attractiveness of both virgin and post-industrial materials.

Figure A: Price of Crude Oil in Dollars per Barrel Over Time



- **The market shift from more expensive nylon carpet to less expensive polyethylene terephthalate (PET) carpet also continued in 2016**, partially contributing to an increase in volume of non-nylon discards in the waste stream and a corresponding decline in nylon discards (see Figure K). PET materials are historically more difficult to recycle compared to nylon. Non-nylon carpet recycling processes are not as advanced, and fewer products and markets are available, thus less materials are generated to be sold as recycled output.
- **The shutdown of two Tier-1 processors (one in California) in 2016** resulted in reduced processor capacity and demand for PCC. The total loss of national capacity was approximately 100 million pounds per year for nylon 6.

These conditions inhibited the growth of gross collections and recycled output in 2016, with recycled output seeing a slight dip in Q1, and reaching a high of 12% in Q3. The overall recycled output rate of 11% for 2016 is a slight increase from 10% in 2015, as is gross collections (31% of discards in 2016, compared to 30% in 2015).

It should be noted that the percent recycled output calculation is determined by both the pounds of recycled output (numerator) and sales used to calculate the pounds of discards (denominator).

2.3 Program Response and Performance

2.3.1 Program Changes

To address the stagnating market, an assessment increase from \$0.10/sqyd to \$0.20/sqyd was implemented in Q2 2016. This allowed the Program to enact both short- and long-term strategies, including those proposed in Addendum 3 to the California Carpet Stewardship Plan 2011-2016 (2011-2016 Plan). This included:

- Reducing the reserve amount from the average of two quarters to the average of one quarter to make more funding available for critical activities.
- Moving to monthly reporting to speed subsidy payouts and aid cash flow for CSEs, Tier-1 processors, and Tier-2 manufacturers.
- Developing an economic model for analyzing 'what if' scenarios.
- Expanding budgets for collection site support and outreach and education.
- Adding a suite of collector/sorter entrepreneur (CSE), Tier-1 processor, and Tier-2 manufacturer subsidies, and modifying others.

2.3.2 Progress in Gross Diversion, Recycled Output, Recyclability, Reuse, and Net Diversion

In 2016, the Program continued to work to improve gross collection of PCC, which increased by 4%, from 103 million lbs in 2015 to 107.2 million lbs in 2016. This was supported by expanding the number of CARE enabled California drop-off sites to 33 sites servicing 33 counties, up from 23 sites in 22 counties in 2015. CARE estimates approximately 200 private drop-off sites were also operating around the state. The program saw an 8.6% increase in recycled output in 2016, up from 35 million lbs in 2015 to 38 million lbs in 2016.

Efforts to increase recyclability of carpet also increased, which was seen in the over 2.4 million lbs of calcium carbonate recycled in 2016, a significant jump from over 61,000 lbs in 2015, representing 6.3% of total 2016 pounds recycled. This was a result of the calcium carbonate subsidy introduced in 2015.

Recyclability was also supported by the carpet tile recycling subsidy implemented in Q2 2015. 1.12 million lbs of carpet tile were recycled in 2016, an increase of 31% from 2015. The carpet tile/broadloom reuse subsidy also supported a rise in PCC reuse in 2016, with a 51% increase from 2015 (614,000) to 2016 (926,000).

An average of 25% of all PCC discards in 2016 were net diverted from California landfills, up from 23% of discards in 2015. Diversion via energy recovery (sum of CAAF, Kiln, and WTE) decreased by 29% in 2016, falling to 21.02 million lbs from 29.73 million lbs in 2015.

2.3.3 Progress in Market Development

2016 saw continued improvements in market development and growth. Implementation strategies included a mixture of subsidies, growth incentives, grants (Cycle 1A, 1B, and 1C), and technical assistance. Activities centered on developing products and markets for California-generated PCC in the following ways:

- Expansion of infrastructure capacity for collection, processing, and manufacturing secondary products (supported by Cycle 1A capital grants).
- Development of new recycled carpet products produced in California (supported by Cycle 1B testing grants).
- The development of the Double Green™ label to encourage the inclusion of California sourced PCC plus one additional post-consumer recycled material in secondary products.
- Engagement of public entities to spur interest in purchasing recycled carpet products, including the development of the Double Green™ label and Cycle1C procurement grants.
- 85%% of the approximately \$2.0 million in cycle 1A/1B grant funding was committed to California-based projects.
- Exploration of alternative uses for existing carpet products.
- Increasing the number of Tier-2 manufacturers producing recycled carpet products in California.
- Awarding Cycle 1A/1B grants to support capital investments and product testing, which will serve to increase the collection, recyclability, and utilization of California-generated PCC.
- The launch of the Cycle1C procurement grants.
- Working with CalRecycle and the Tire-Derived Products Program to collaborate across program boundaries to seek opportunities, such as the Double Green™ label development.
- Enabling the use of carpet backing materials (residual from face fiber recovery), which enhances the yield per square yard.

In 2016, Tier-2 manufacturer incentives continued to spur product development of a wider variety of products using recycled carpet output. Both subsidies and grants drove an increase in the number of Tier-2 manufacturers interested in processing carpet and producing secondary products in California throughout the year. **Tier-2 manufacturer pounds shipped and sold were the highest to date in 2016, increasing by 50% from 11.8 million lbs in 2015 to 17.7 million lbs in 2016.**

2.3.4 Progress in Outreach and Education

The education and outreach budget increased significantly in 2016. Ongoing communications with retailers, drop-off sites, local government, and other stakeholders increased as more programs, such as grants, and more opportunities, such as new drop-off sites, became available. Print and electronic collateral was distributed. Engagement was measured via response rates, open rates, web page visits, and other uptake metrics.

The following strategies were employed:

- Continued one-on-one retailer contacts to raise awareness of the Program's activities and as a distribution point for collateral. Reaching out to retailers allows for contact with harder-to-reach audiences, such as carpet installers and the general public.

- Expanded contacts with local government recycling coordinators and procurement officials to raise awareness of Program activities such as local drop-off sites and the availability of recycled carpet content products. Distributed collateral and a quarterly newsletter to keep recycling coordinators and others informed.
- Explored additional marketing avenues, such as video creation and digital ads, to raise awareness of Program efforts, recognizing that focused outreach to the right audiences is key to raising public awareness.
- Worked with the newly formed California Council on Carpet Recycling to gather stakeholder input.
- Raised awareness of recycled carpet content products with a dedicated website section and Buy Recycled messaging.
- Promoted new opportunities, such as the grant program, as a way to introduce CARE and the Program to a wider audience in local government and the public.

2.4 Conclusion

In 2016, the Program acted to set mechanisms in motion to ensure continuous and meaningful improvement today and well into the future, while continuing to build a stable foundation for sustainability and growth of the industry. Early results from 2017 indicate those actions are gaining momentum resulting in a significant increase in recycled output in Q1 2017.

An assessment increase allowed the Program to enact both short- and long-term strategies, including a series of new and modified subsidies, expanding budgets for collection site support and outreach and education, and the development of an economic model for analyzing 'what if' scenarios. Development of new recycled carpet products and awarding of grants to support capital investments and product testing led to increased market development. Increased communications with retailers, drop-off sites, local government, and other stakeholders led to an increase in awareness of Program activities and efforts, as well as contact with harder-to-reach audiences, such as installers and the general public.

Moving forward, the California Program will continue to partner with its stakeholders to find new ways to stimulate the industry in both the short- and long-term to increase collection, processing capacity, and manufacturing presence in California, while promoting carpet recycling across the state.

Table 1. Summary of 2016 Program Performance Metrics

Metric*	Unit	Baseline 7/2011-6/2012	2012 Total 1/2012-12/2012	2013 Total 1/2013-12/2013	2014 Total 1/2014-12/2014	2015 Total 1/2015-12/2015	2016 Total 1/2016-12/2016
Carpet Sold in CA	Square yards	98 Million	99 Million	101 Million	99 Million	97 Million	94 Million
Assessment Paid	Dollars	\$4.9 Million	\$4.9 Million	\$5.1 Million	\$4.9 Million	\$8.6 Million	\$16.6 Million
Total Expenses (All inclusive)	Dollars	\$1.6 Million	\$2.9 Million	\$4.3 Million	\$5.3 Million	\$8.5 Million	\$14.5 Million
Post Consumer Carpet (PCC) Discards	Pounds	357 Million	357 Million	364 Million	358 Million	345 Million	343 Million
Gross Collection (GC) (recovered before recycling), a.k.a. "Throughput"	Pounds	100 Million 28% of discards	112 Million 31% of discards	107 Million 29% of discards	123 Million 34% of discards	103 Million 30% of discards	107 Million 31% of discards
Recycled Output (RO) (reuse, tile recycled, fiber, depoly, calcium carbonate, filler, carcass)	Pounds	28 Million 8% of discards	36 Million 10% of discards	44 Million 12% of discards	43 Million 12% of discards	35 Million 10% of discards	38 Million 11% of discards
GC Conversion Rate, a.k.a. "Yield"	GC:RO	28% of GC	32% of GC	41% of GC	35% of GC	34% of GC	35% of GC
RO Rate, a.k.a. "Recycling Rate"	RO:PCC	8%	10%	12%	12%	10%	11%
Non-Nylon Tier-2 Manufacturer Output Pounds	Pounds	N/A	N/A	1 Million	10 Million	12 Million	18 Million
Reported Diversion (reuse, tile recycled, fiber, depoly, calcium carbonate, filler, carcass, kiln, CAAF, WTE, exports, cushion)	Pounds	50 Million (14% of discards; 50% of GC)	62 Million (17% of discards; 55% of GC)	72 Million (20% of discards; 67% of GC)	90 Million (25% of discards; 73% of GC)	80 Million (23% of discards; 78% of GC)	68 Million (20% of discards; 63% of GC)
Reported Diversion (reuse, tile recycled, fiber, depoly, calcium carbonate, filler, carcass, kiln, CAAF, WTE, exports)	Pounds	47 Million (13% of discards; 47% of GC)	56 Million (16% of discards; 50% of GC)	69 Million (19% of discards; 64% of GC)	85 Million (24% of discards; 69% of GC)	73 Million (21% of discards; 71% of GC)	61 Million (18% of discards; 57% of GC)
Net Diversion (calculated as GC - Waste back to LF)	Pounds	78 Million (22% of discards; 78% of GC)	79 Million (22% of discards; 71% of GC)	70 Million (19% of discards; 66% of GC)	103 Million (29% of discards; 83% of GC)	81 Million (23% of discards; 78% of GC)	86 Million (25% of discards; 80% of GC)
Reuse	Pounds	98 Thousand (0.03% of discards; 0.10% of GC)	152 Thousand (0.04% of discards; 0.14% of GC)	26 Thousand (0.01% of discards; 0.02% of GC)	174 Thousand (0.05% of discards; 0.14% of GC)	614 Thousand (0.18% of discards; 0.60% of GC)	926 Thousand (0.27% of discards; 0.86% of GC)
Source Reduction (SR)	Pounds	4.2/yd2	4.2/yd2	4.2/yd2	4.2/yd2	4.2/yd2	4.39/yd2 (effective Q3)
Carpet as an Alternative Fuel (CAAF)	Pounds	0	0	137 Thousand (0.04% of discards; 0.13% of GC)	0	0	54 Thousand (0.02% of discards; 0.05% of GC)
Kiln	Pounds	0	44 Thousand (0.01% of discards; 0.04% of GC)	48 Thousand (0.01% of discards; 0.04% of GC)	9.3 Million (2.6% of discards; 7.5% of GC)	6.9 Million (2.0% of discards; 6.7% of GC)	3.4 Million (1.0% of discards; 3.2% of GC)
Waste-To-Energy (WTE)	WTE:PCC	15.7 Million (4% of discards; 16% of GC)	11.4 Million (3% of discards; 10% of GC)	20.3 Million (6% of discards; 19% of GC)	21.3 Million (6% of discards; 17% of GC)	22.9 Million (7% of discards; 22% of GC)	17.5 Million (5% of discards; 16% of GC)
Waste to Landfill (LF)	Pounds	22.2 Million	32.8 Million	36.7 Million	20.3 Million	22.4 Million	21.2 Million
Total PCC Waste Disposal to LF	Pounds	279 Million	278 Million	293 Million	255 Million	265 Million	257 Million
Greenhouse Gas (GHG)	MTCO2E	(24,926)	(37,370)	(42,053)	(36,141)	(27,129)	(34,673)

*Metric definitions are current at the end of 2016. Definitions have evolved over time and may have been different in the past.

3 Scope – Section 18944(3)

Statutory Citation:

(a) The annual report must contain the following:

3. Scope. The program described in the stewardship plan accepts and manages all applicable post-consumer carpet.

(A) Indicate any changes in the program scope from the approved stewardship plan.

(B) Indicate the scope is unchanged, if no changes have occurred during the reporting period.

3.1 Program Description

Signed into law on Sept. 30, 2010, AB 2398 is the first of its kind carpet stewardship program supported by legislators, California entrepreneurs, local governments, non-governmental organizations (NGOs), and the carpet industry. AB 2398 designated the Carpet America Recovery Effort (CARE) as the Carpet Stewardship Organization (CSO) for the carpet industry. The California Carpet Stewardship Plan 2011-2016 (2011-2016 Plan) was submitted on behalf of all carpet mills that participated under the 2011-2016 Plan.

As of December 31, 2016, there were 76 carpet mill participants in the 2011-2016 Plan. Names of the participating carpet mills can be found in Appendix 10.7 and is updated regularly on the [CalRecycle website](#). In 2015, the 2011-2016 Plan was revised through three separate addenda in order to support continuous meaningful progress in line with the goals of AB 2398 and in response to dynamic market conditions. The first and second addenda were approved in 2015, and the third addendum was approved in January 2016. The California Carpet Stewardship Plan (version 3.2.2) plus these three Addenda collectively comprise the 2011-2016 Plan.

In 2016, the CARE California Stewardship Program (Program) proposed the adoption of a new 5-year California Carpet Stewardship Plan 2017-2021 (2017-2021 Plan), submitted to CalRecycle for consideration in October 2016. The 2017-2021 Plan detailed fiduciary, financial, educational, and marketing strategies to accomplish the goals of AB 2398. Consistent with the statute, elements of this plan are designed to further these principal goals: increasing recyclability, reuse and collection; incentivizing market growth of secondary products; and increasing recycled output and diversion. CalRecycle disapproved CARE's proposed new Plan on December 20, 2016, providing CARE with 60 days to prepare and submit a revised Plan for consideration. CARE is developing a revised Plan in 2017. CalRecycle has approved CARE to continue to operate under the 2011-2016 Plan until a new Plan(s) is submitted by October 19, 2017. As a result, the currently extended Plan will run through the end of 2017, while new plan(s) are examined and public feedback evaluated. A final decision is expected on December 19, 2017.

3.2 Changes in Program Scope

The active 2011-2016 Plan as of December 31, 2016 is Version 3.2.2, approved by CalRecycle in January 2014. In addition, three addenda were submitted and approved in 2015 and early 2016. With these addenda, the California Program took action to address concerns related to the pace at which the Program is making continuous and meaningful improvement in line with statute provisions. Combined, these four documents comprise the 2011-2016 Plan.

- Addendum 1 - Submitted to CalRecycle 12/28/2014; Approved 1/5/2015
- Addendum 2 - Submitted to CalRecycle 10/09/2015; Approved 10/20/2015
- Addendum 3 - Submitted to CalRecycle 11/30/2015; Approved 1/26/2016

In 2016, the Program developed the 2017-2021 Plan, which was submitted to CalRecycle in October 2016 and disapproved by CalRecycle in December 2016. In 2017, the Program is revising and resubmitting the Plan. The 2017-2021 Plan represents extensive work by and engagement with CARE and the Program, its committees, the California Council on Carpet Recycling (Council), CalRecycle, and other industry and public stakeholders.

Per Addendum 2, the Council was created in 2016. Following a call for nominations in November 2015, 18 members, and a Council facilitator, were selected in early 2016. The Program planned and facilitated four Council meetings in February, March, April and June 2016. Through these meetings, the Council contributed greatly to the strategic planning and development of the 2017-2021 Plan.

3.3 Summary of Program Changes

3.3.1 Addendum 3

Addendum 3, approved in January 2016, proposed changes to the Program's operating model to further improve its responsiveness to fluctuating market conditions. Approved changes improved financial reporting and transparency and included:

- Reducing the reserve amount from the average of two quarters to the average of one quarter, based on the last 4 quarters, to make more funding available for critical activities.
- Moving to monthly reporting to speed subsidy payouts and aid CSEs, Tier-1 processors, and Tier-2 manufacturers with a stable and known cash flow.
- Developing an economic model for analyzing 'what if' scenarios.
- Expanding budgets for collection site support and outreach and education.
- Adding a suite of collector/sorter entrepreneur (CSE), Tier-1 processor, and Tier-2 manufacturer subsidies, and modifying others.

To achieve these initiatives (including the Council and Grant program elements approved in Addendum 2,) the assessment was doubled from \$0.10/sq yd to \$0.20/sq yd, effective Q2 2016. For more information on each Addendum, refer to Section 3 – Scope of the 2015 CARE California Carpet Stewardship Program Annual Report.

3.3.2 California Carpet Stewardship Plan 2017 – 2021

To develop the 2017-2021 Plan, the Program relied heavily on stakeholder input through the Council, stakeholder workshops, presentations, surveys, and webinars. The primary stakeholder input came from the four Council meetings held in 2016, from which recommendations, individual strategies, and analyses were then taken to the Stewardship Planning Committee (SPC) for review.

A second integral tool to develop elements of the 2017-2021 Plan was the Fund Balance Forecast Model. This tool, developed in coordination with Aprio (previously named HA&W), the Program's third-party accounting firm, was used for scenario budgetary planning for the 2017-2021 Plan. A third tool, an Economic Model developed in coordination with Louis Berger, enabled the Program to consider various economic elements and trends. The Economic Model will continue to be refined in 2017.

After multiple intensive reviews of the Plan, including synthesis of strategy and subsidy cost scenarios, a final plan was submitted to CalRecycle on October 10, 2016. The public comment period was open until November 14, 2016. On December 20, 2016, the 2017-2021 Plan was disapproved at the CalRecycle Public Meeting. In 2017, the Program is revising and resubmitting the 2017-2021 Plan.

3.3.3 California Council on Carpet Recycling (Council)

Following a call for nominations in November 2015, and nominee evaluations in December 2015 and January 2016, 18 Council members and a Council facilitator were announced in February 2016. The Council held four meetings in 2016 in February, March, April, and June 2016. These meetings were facilitated by environmental marketing agency Gigantic Idea Studio (GIS) and chaired by SPC Chair Eric Nelson of Interface, who also served as liaison to the SPC. In addition to the 18 Council members, several SPC members participated in two of the four meetings. During these meetings, as well as two separate stakeholder meetings held in March 2016, the Council provided the Program with the bulk of the stakeholder feedback considered by CARE in the development the 2017-2021 Plan. Although not all ideas generated and prioritized by the Council were included in the proposed Plan, the Program's governing bodies, the SPC and the Sustainable Funding Oversight Committee (SFOC), considered these ideas carefully in final decision making for the 2017-2021 Plan. Many of the Council's ideas, as prioritized by the Council, were incorporated in the 2017-2021 Plan submitted in October 2016, but were not clearly delineated, as this plan was designed to allow maximum flexibility. Based on the findings of the CalRecycle rejection letter, CARE could have been more explicit in how the ideas were evaluated and incorporated in the 2017-2021 Plan. The Council will continue to be engaged in 2017 to inform proposed Plan revisions and ongoing Program development and implementation.

Following submission of the 2017-2021 Plan in October 2016, a total of 15 letters were submitted by various stakeholders including carpet mills, Tier-1 processors, Council members, and other parties in November 2016. The letters can be found at <http://www.calrecycle.ca.gov/carpet/Plans/Comments/default.htm#Nov2016>.

3.4 Laying a Foundation for Change

The California Program worked to stimulate the market in 2016 for lasting change through short- and long-term approaches. To support development of a more robust carpet recycling industry, the Program stimulated short-term change through strategies such as expanding outreach and education, adding drop-off sites, and increasing processor and reuse subsidies. For a summary of incentives in 2016, see Table 2. For a complete list of subsidies including adjustments adopted in 2015 and 2016, refer to Appendix 10.1. Other changes were undertaken to spark long-term change, such as the development of the 2017-2021 Plan, the establishment of the Council, and a growing processing and manufacturing infrastructure capacity within California.

By balancing both short- and long-term approaches and reacting quickly to unstable market conditions, the California Program is laying a strong foundation for the future and supporting continued meaningful improvement. The Program's responsiveness to a changing market as indicated by Addendum 3, as well as additional Program strategies detailed in this report, drove continued recovery in the recycled output rate from the Q3 2015 quarterly low of 7%, even as the Program fell short of its 2016 recycled output goal. The groundwork is being laid to improve ongoing responsiveness to future market changes and to increase the communications among the Program and its many stakeholders for long-term success.

Table 2. Summary of Incentives

CSEs	Rate
CSE Reporting Incentive	\$1,000
Carpet Tile Reuse Payout	\$0.10/lb.
Broadloom Reuse Payout	\$0.10/lb.
Whole Carpet Shipped and Sold for Recycling Payout*	\$0.02/lb.

Processors	Rate
Carpet Tile Reuse Payout	\$0.10/lb.
Broadloom Reuse Payout	\$0.10/lb.
Tile Recycled Payout	\$0.10/lb.
Type 1 Output (Fiber and DePoly only) Payout	\$0.10/lb.
Type 2 Output (Filler and Carcass only) Payout	\$0.03/lb.
Type 2 Calcium Carbonate Payout	\$0.17/lb.
Type 2 CAAF Payout**	\$0.03/lb.
Type 2 Cement Kiln Payout**	\$0.03/lb.
Growth Incentive Pounds Target	11,000,000
Growth Incentive Payout Over Target	\$0.10/lb.

Manufacturers	Rate
Non-Nylon Payout	\$0.25/lb.
Growth Incentive Pounds Target	3,500,000
Growth Incentive Payout Over Target	\$0.10/lb.

**Quarterly cap of \$150,000 and annual cap of \$400,000*

***Sum of CAAF and Kiln Payout cannot exceed 15% of total quarterly payout*

4 Program Outline – Section 18944(a)(4)

Statutory Citation

Describe the carpet stewardship program, including information on the following topics:

(A) Types of collections sites and basic information about recycling facilities in California, e.g., how carpet is collected, number and location of processors, throughput and capacity of recycling facilities.

(B) Include facility name(s) and address(es) for each method of disposition.

4.1 Program Description

The California Carpet Stewardship Program (Program) is responsible for increasing recycling and diversion of California post-consumer carpet (PCC) on behalf of carpet mills that sell or distribute their products in the state. The Program targets all carpet material types: residential and commercial, indoor/outdoor, carpet and carpet tile materials. It excludes rugs, underlayment, carpet cushion, and synthetic turf.

Retailers pass on a CalRecycle-approved assessment to consumers on behalf of carpet mills. Retailers submit the assessment to carpet mills when they pay their product invoices. Carpet mills submit assessment funds to CARE as the Carpet Stewardship Organization (CSO) on a quarterly basis. These assessment funds are used by the California Program to increase carpet recycling and diversion opportunities consistent with program goals.

Assessment funds support carpet collections/drop-off sites, recycling (Tier-1 processors) and recycled product manufacturing (Tier-2 manufacturers), market development, grants, outreach and education, and technical assistance. Funds also support program administrative oversight activities by CalRecycle, which may receive up to 5% of all assessments from the prior calendar year per statute.

For the public, the carpet recycling process starts with identifying and establishing public and private drop-off sites throughout the state in both urban and rural areas. Collector/sorter entrepreneurs (CSEs) receive PCC from drop-off sites, sort the collected PCC by fiber type, bale like materials, and sell the carpet to processors, who recycle the materials in their facilities. Processors may reside inside or outside of California, but must utilize California-generated PCC in order to participate in the Program. Processors produce various “recycled output” materials, such as carpet fibers and concentrated calcium carbonate (from carpet backing), which is then ready to be used as feedstock for new products. Processors sell these recycled materials to manufacturers for use in new recycled content products. CARE works both inside and outside of California to develop markets for new and existing PCC content products.

Tier-1 processors receive whole carpet either directly from generators or from CSEs. Most carpets are not easily identifiable visually. Sorting is done by hand, using a specialized infrared device (Axsun or a microphazer), which identifies the face fiber material type. Fiber types include nylon 6, nylon 6,6, polyethylene terephthalate (PET), polytrimethylene terephthalate (PTT), polypropylene (PP), mixed fibers, and natural fibers (e.g. wool). This identification process will be streamlined in the future with the addition of an industry-funded back label on carpeting, which was approved in 2015 and began roll out in 2016. It will take a number of years for back labeling to impact the PCC recycle stream, but this step is an important development in improving polymer identification, and thus recyclability. Like materials are sold to processors based on market demand. Presently, mixed fibers and natural fibers do not have market outlets. Demand for nylon 6,6, and especially nylon 6, has declined significantly in recent years, while both generation and demand for non-nylon (PET/PTT and PP) have increased, in part due to Program-provided subsidies offsetting the gap between virgin and recycled polymer pricing.

Methods for processing whole carpet include a wide range of technical and engineering approaches to mechanically separate the more valuable face fiber from the backing material. Cleaned and sifted face fiber may be used as a feedstock or combined with other feedstock materials for the production of new products. Chemical depolymerization may be used to produce a polymer that can be re-extruded into pellets and then made into new plastic products. However, this is an expensive process limited to nylon 6 and contributes a very small percentage to overall recycling at this time. Calcium carbonate can be removed from the backing material and used in new products. Latex, glues, unrecyclable backing and face fiber may be diverted via waste to energy or placed in a landfill. Under the California Carpet Stewardship Plan 2011-2016, diversion includes when carpet material is reused as is, processed into a recycled output feedstock for new products, processed for use in Carpet As Alternative Fuel (CAAF), feedstock for cement kilns, or discards utilized as a waste-to-energy (WTE) source, or exported.

Collection and processing waste that cannot be reused, recycled, utilized for energy recovery (CAAF, Kiln, or WTE), or otherwise diverted is sent to landfill. The California Program tracks the amount sent to landfill as a separate item. Currently about 35% of gross collections are converted to recycled output, 80% is recycled or diverted, and the remaining 20% of gross collected material ends up as landfill. The Program is working to increase carpet reuse and recycling, divert materials that cannot feasibly be recycled, and reduce the amount of carpet discards sent to California landfills. When whole carpet is shipped outside of the United States for processing, the Program tracks and reports quantities of carpet exported as diverted, but is unable to track the precise final disposition of the exported materials.

4.2 Drop-off Sites

Post-consumer carpet is collected at two types of sites before being delivered to CSEs or processors for sorting and processing:

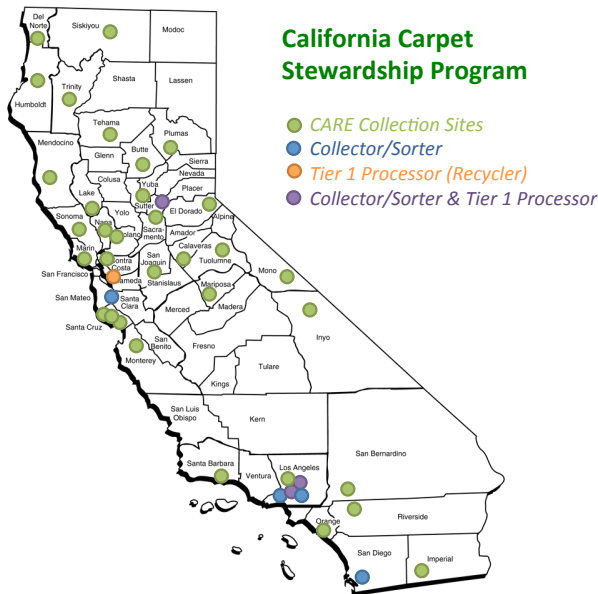
- Public drop-off sites.** Most public drop-off sites are sponsored by CARE, and all are available to the general public. Many of these sites have been established in coordination with local government representatives in each target region. Public drop-off sites are generally placed at traditional disposal locations such as transfer stations, landfills, material recovery facilities (MRFs), or construction and demolition (C&D) recovery facilities. These locations allow installation contractors, do-it-yourself (DIY) individuals, and businesses to drop off source-separated and properly prepared PCC discards for recycling. A tip fee may be established by each drop-off location, although CARE encourages sponsored sites to offer reduced tip fees for source-separated carpet to encourage landfill diversion. The California Program provides collection containers, swap-out service, and transportation of PCC to processors from the Program sponsored public drop-off sites.
- Private drop-off sites.** Private drop-off sites are located at commercial businesses (such as carpet retailers or commercial distributors). Private drop-off sites are retailers who recycle using container pick-up service offered by a CSE or processor. These retail flooring businesses provide installation and PCC tear-out services for their customers purchasing new carpet or flooring. Installation contractors may return PCC tear-out to the retailer for recycling. According to recent reports, approximately 200 retailer locations were being serviced statewide during 2016 based on self-reported CSE and Tier-1 processor confidential surveys. Recycling service offered to commercial businesses by CSEs and processors include PCC collection containers (trailers, debris boxes, or cargo bins), swap-out service, and transportation for source-separated PCC discards on a pay-for-service basis. Each service provider directly negotiates rates with each private service site. This container recycling service may be priced lower than regular disposal services.



Sample program sign provided to participating drop-off sites

- **Convenient Collection.** As of December 2016, CARE estimates there are approximately 233 private service and public drop-off sites in California. Preliminary analysis of sites as of May 2017 shows that 92% of the state's population lives within a county with access to one or more private or public carpet recycling sites, providing an average of one site per 161,000 people. Thirteen counties have five or more sites, and nine counties have ten or more sites. A convenience study is part of the 2017-2021 Plan under consideration and will begin in 2017.

In 2017, CARE plans to incorporate both private sites and public drop-off sites into a map to illustrate a more realistic representation of relative distribution of convenient collection throughout the state.



2016 California Drop-off Sites, CSEs, and Tier-1 Processors¹

were established throughout California (See Table 3). Six of the 10 new drop-off sites (60%) are located in southern California. Urban counties account for nine of the 10 new sites (90%), with four of these from the top five most heavily populated counties in the state.

In 2016, CARE staff conducted 32 site visits at potential drop-off sites in 22 counties throughout California.

The Rural County Collection Program began in 2012 as a pilot program with six rural counties. It became a statewide program element in 2015, expanding to include urban sites in Sacramento and Marin. By December 2016, there were 33 Program-supported drop-off sites serving 33 counties (see Appendix 10.6). This is a 43% increase in sites, up from 23 sites in 22 counties in 2015.

The California Program will continue to work closely with Rural Counties Representatives of California (RCRC) to identify, select, and coordinate with prospective counties to expand drop-off opportunities in rural areas. In addition, the Program is coordinating with local governments, local disposal locations, and the California Council on Carpet Recycling (Council) to identify potential drop-off locations in urban counties.

In February 2016, CARE hired a second Senior Associate to assist with bringing southern California counties into the Program. In 2016, 10 new drop-off sites

Table 3: New Drop-off Sites Established in 2016

#	Drop-off Site County	Drop-off Site City	Facility Name
1	Contra Costa	Pittsburg	Contra Costa Waste Service
2	Imperial**	El Centro	Imperial Landfill
3	Los Angeles*	Los Angeles	American Reclamation
4	Orange*	Irvine	Sunset Environmental Transfer Station
5	San Joaquin	Manteca	Lovelace Transfer Station
6	Santa Barbara	Santa Barbara	Marborg Industries
7	Sonoma	Santa Rosa	Industrial Carting & Global Materials Recovery Services
8	Riverside*	Riverside	Robert A Nelson Transfer Station
9	San Bernardino*	Fontana	West Valley MRF & transfer Station
10	Monterey	Salinas	Sun Street Transfer Station

**These four counties fall within the top five most heavily populated counties in the state.*

***Qualifies as rural county under CalRecycle definition, generating less than 200,000 tons annually.*

Procedures for Recruiting and Supporting New Drop-off Sites (see Appendix 10.2 for a graphic of the Participant Onboarding Procedure):

- Program staff conducts site visits to potential drop-off sites and local government representatives to provide sites with a program overview and technical assistance, which includes recommendations for the location that best meet local needs.
- A semi-trailer or cargo shipping container (type and size selected in coordination with the facility) is placed at the facility.
- Participating counties oversee daily operations and promote the program to contractors, installers, retailers, and DIY individuals. Facilities may adjust tipping fees to encourage participation. All entities dropping off carpet must prepare the carpet by cutting it into manageable segments (generally four to six feet), packaging the carpet into rolls, removing tack-strips, trash, or debris, separately rolling or stacking carpet pad (where accepted), and dropping it off at the designated recycling area.
- The Program covers the costs of container rentals (cargo container or semi-trailer) transportation to the CSEs or Tier-1 processors, and the tip fee associated.



Carpet recycling trailer at drop-off site



Drop-off site staff loading container

- The Program also provides educational materials including signage, newsletter article, press release, and bilingual flyers tailored to the needs of each county to support local education and outreach.

In 2016, a pilot Drop-off Site/Hauling Program was initiated in southern California. For most public drop-off sites, the Program provides a container for collecting carpet and coordinates a swap-out service with a third-party hauler to deliver the material to a CSE or Tier-1 processor. This pilot differs from the typical drop-off site in

that the site itself acts as both the public drop-off site and hauler to the destination CSE or Tier-1 processor. This pilot was intended to continue until at least the end of 2016, subject to operational success and compliance with program best practices and protocols. The hauling pilot has been a success overall, with five southern California sites participating, and is slated to continue in 2017.

As the number of drop-off sites increased throughout 2016, the number of total service requests and pounds of collected carpet also increased. The Program supported 235 service requests (pulls of full containers) in 2016, including both cargo containers and semi-trailers. This included 33 participating counties and 33 drop-off sites serviced by two haulers, as well as service requests from the pilot Drop-off Site/Hauling Program. Approximately one third of the drop-off sites use cargo bins, while the remaining two thirds use trailers.

Drop-off site program highlights for 2016 include:

- Estimated 4.14 million lbs of carpet were collected in 2016, a **74% increase** over the 2.38 million lbs collected in 2015.
- Total Costs (Hauling + Storage + Tipping Fees) = \$613,728 in 2016 (vs. \$441,376 in 2015), a 39% increase
- Average cost of \$0.15/lb (vs. \$0.19/lb in 2015)
- 10 drop-off sites added, a 43% increase from 2015.
- Updated education and outreach materials (See Section 8).
- Improved service systems, including a refined invoice process, increased efficiency with reduced turnaround time for container swap-outs, and updated on-boarding processes.



Site staff prepare material for recycling

4.3 Collector/Sorter Entrepreneurs (CSEs)

The first link in the carpet recycling ecosystem is CSEs. These entities collect used carpet and sort it by fiber type in preparation to sell to processors, who then recycle the material into usable recycled output. CSEs collect used carpet in three ways, generally as a fee for service: 1) CSEs may place a trailer or container at a drop-off site; 2) CSEs may accept carpet drop-offs at their warehouses; 3) CSEs may collect carpet from a private drop-off site, such as a retailer.

CSEs are eligible for two types of subsidies:

- CSE (Whole Carpet Sorted/Shipped/Sold) Subsidy: \$0.02/lb for carpet that is sorted, sold, and shipped, with a cap of \$150,000/quarter or \$400,000 year
- Reuse Subsidy (Carpet Tile/Broadloom): \$0.10/lb for materials shipped and sold/donated

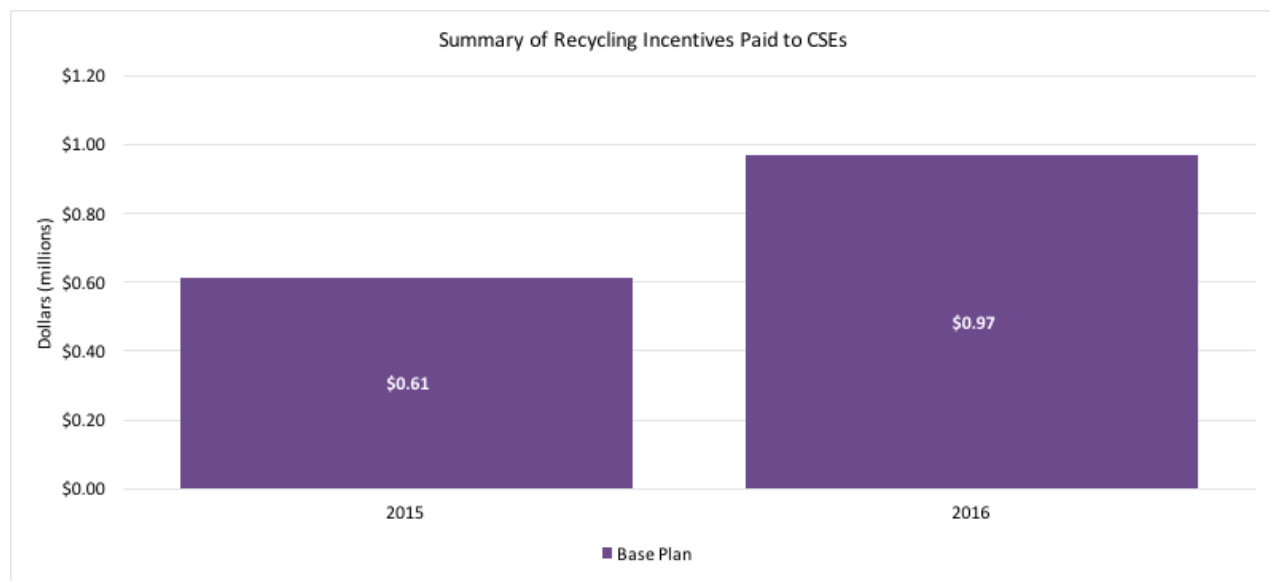
Seven CSEs participated in the California Program during 2016, up from five in 2015 (See Table 4). Three participating CSEs also function as Tier-1 processors. To be considered a qualifying recipient for potential subsidy funding in 2016, CSEs are required to be CARE members in good standing and sign an agreement. Under the agreement, CSEs are subject to program reporting, Agreed Upon Procedures (AUP) review, management practices, and documentation requirements.

Table 4. CSEs Requesting & Receiving Funding During 2016

	Parent Company	City	State	Status
1	A-1 Planet Recycling	Phoenix Chula Vista	AZ CA	Active
2	CLEAR	Lincoln	CA	Active; CA facility operational in April 2016
3	Carpet Solutions	Carson	CA	Active
4	Construction & Demolition Recycling, Inc. (CDR, Inc.)	Carson	CA	Active
5	Gone Green Recycling	South Gate	CA	Active; began reporting in September 2016 but only handled pad during 2016
6	GreenWaste Carpet Recycling	San Jose	CA	Active
7	Los Angeles Fiber Co. (LA Fiber)	Vernon	CA	Active

In 2016, the Program paid out \$0.97 million to CSEs as subsidies, up from \$0.61 million in 2015 (See Figure B).

Figure B. CSE Payouts Over Time



4.3.1 CSE Facilities

A list of all public CSEs and their addresses is included in Appendix 10.3. Listed facilities are limited to members of the California Program, locations that are participating in the California subsidy program, and those that have specifically coordinated with the California Program to be listed as a drop-off site. Additional privately contracted drop-off sites are present throughout California, but for competitive reasons, CSEs do not currently release listings of their private drop-off locations. Participating facilities and accepted materials change over time; data maintained on the California Program database is based on the best available data as reported by the participating facility. Members are encouraged to update their data annually.

The California Program's online California drop-off site map gives the public an easy, interactive way to find active drop-off sites for their used carpet, and is also available as a PDF for download (See Appendix 10.6). The map uses data from a survey of current sites and lists information such as the CSE's address,



*Public Drop-Off Site Map
(as of December 2016)*

hours, and tipping fees. The map is updated regularly and promoted via digital, print, and in-person communications.

4.4 Tier-1 Processors

Tier-1 processors receive source-separated PCC discards and convert material into recycled output to be used in the manufacturing of secondary products. Some Tier-1 processors may also function as Tier-2 manufacturers and/or CSEs. 13 processors were registered with the Program in 2016, with two becoming inactive over the term. There were 11 active processing operations participating in the California Program at the close of 2016 (See Table 5).

Table 5. Tier-1 Processors Requesting & Receiving Funding in 2016

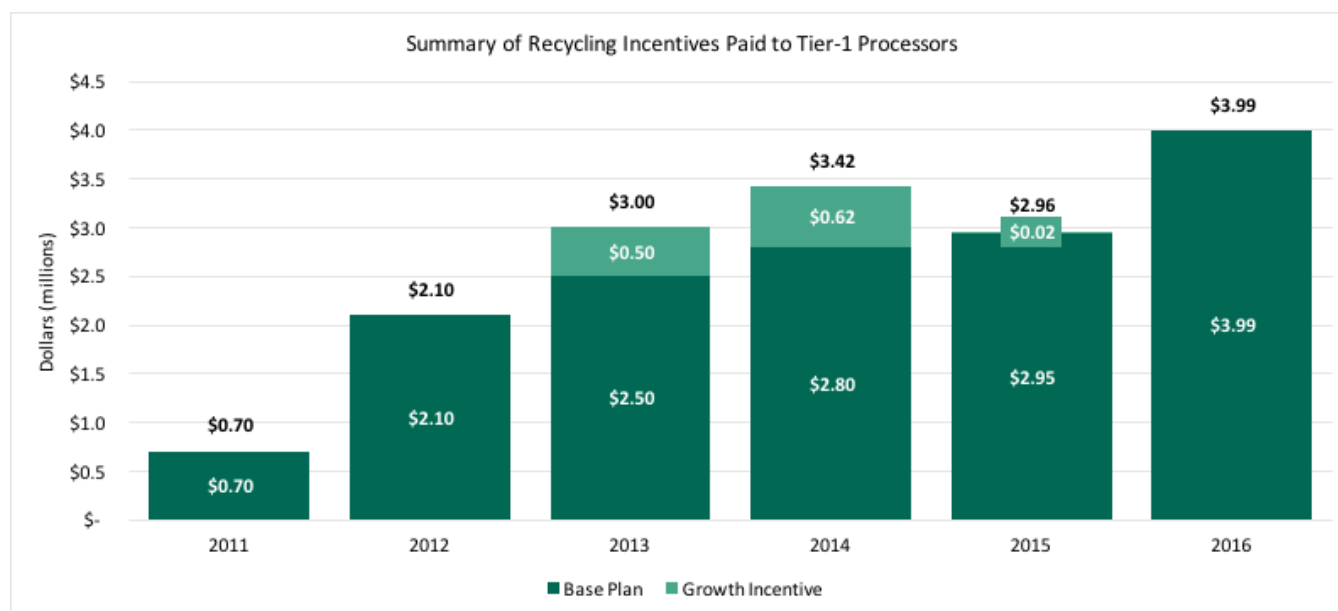
	Parent Company	City	State	Status
1	Aquafil USA	Cartersville	GA	Active; began reporting in February 2016
2	Bro-Text	Saint Paul	MN	Active; began reporting in June 2016
3	Carpet Solutions	Carson	CA	Active; CARE grant recipient
4	CarpetCycle	Newark	NJ	Active; began reporting in May 2016
5	CLEAR	Lake Villa Lincoln	IL CA	Active; opened second facility in CA in April 2016; CARE grant recipient
6	Columbia Recycling Corp.	Dalton	GA	Active
7	Gold Pond Corp.	Dalton	GA	Active
8	Interface, Inc.	Atlanta	GA	Active
9	Los Angeles Fiber Co. (LA Fiber)	Vernon	CA	Active
10	ReThink Green	San Leandro	CA	Inactive; ceased reporting as of April 2016
11	Shaw Industries Group, Inc.	Dalton	GA	Inactive; discontinued operations in late 2016 but continues to report
12	Tandus Centiva Inc.	Dalton	GA	Active
13	Wellman	Johnsonville	SC	Active; began reporting in March 2016

Of the 11 Tier-1 processors active at the close of 2016, three (27%) had operating facilities within California, while the remaining eight processed California carpet through operations located in other states. Not all processors participated every quarter. 13 Tier-1 processors were active at the beginning 2016, with seven actively requesting funds each quarter (including one that opened a second facility in California in Q2 2016.) Two others began reporting in Q1 2016, and two began reporting in Q2 2016. One Tier-1 processor became inactive and ceased reporting in Q2 2016, and another discontinued operations in Q4 2016. At least one California company operates as both a Tier-1 processor and Tier-2 manufacturer.

Additional secondary products may use nylon or calcium carbonate as recycled content feedstock in such products as carpet/carpet tile, rubber mats, ramps/transitions, wheel stops, molded plastics, engineered resins, etc. but are not eligible to receive Tier-2 subsidies and thus are not tracked by the Program.

In 2016, the Program paid out \$3.99 million to Tier-1 processors as subsidies, up from \$2.96 million in 2015 (See Figure C). Tier-1 processors earned \$0 in Tier-1 growth incentive funds in 2016. The Tier-1 growth incentive is discontinued as of January 1, 2017.

Figure C. Tier-1 Processor Payouts Over Time*



*In some cases, manual adjustments are made to payouts after reports are submitted by participants; Figure C does not include these adjustments. The adjustments were included in the Program's 2016 quarterly reporting to the SPC, SFOC, and CalRecycle. Adjustments include, but are not limited to, deductions for late membership fees, self-reported errors, and errors in reporting found through Agreed Upon Procedures (AUPs).

The Tier-1 processors in Table 5 have requested AB 2398 subsidy funding at least once during the reporting period. Tier-1 processors are required to be CARE members in good standing and have signed a Processor Agreement to be a qualifying recipient for subsidy funding. Qualified recipients are subject to program reporting, AUP review, management practices, and documentation requirements.

4.5 Tier-2 Manufacturers

Used carpets may be recycled to make new carpet or as a feedstock component in the manufacture of other products. Tier-2 manufacturers buy recycled output processed from the carpet fiber or carpet backing and incorporate it into new or existing products. During 2016, there were ten active Tier-2 manufacturers producing a variety of products, including: carpet/carpet tile, carpet cushion/underlayment, building insulation, water heater blankets, mattresses, pillows, pallets, automotive coverings, shelving units and toolboxes, packaging, and erosion control products.

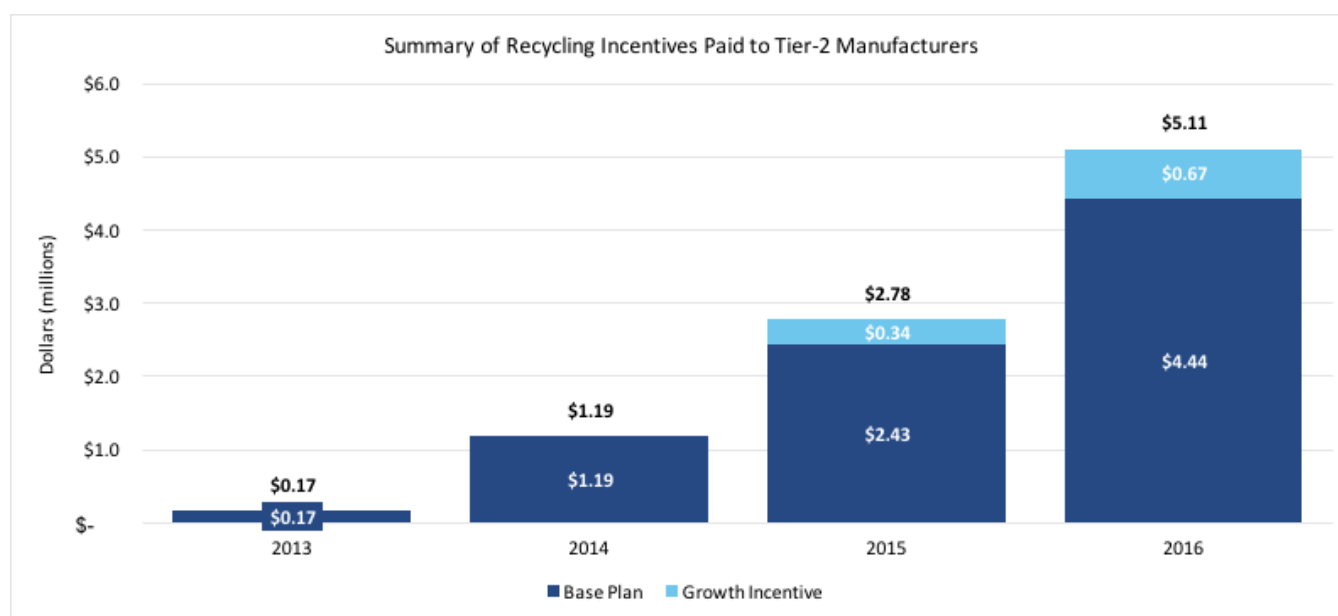
The Tier-2 manufacturers in Table 6 have requested AB 2398 subsidy funding at least once during the 2016 reporting period, are CARE members in good standing, and have signed an Agreement as a qualifying recipient for subsidy funding in 2016. Qualified recipients are subject to program reporting, AUP review, management practices, and documentation requirements.

In 2016, two new companies signed contracts to join as Tier-2 manufacturers (one in Q2 and one in Q4). Another company opened a second facility in California in 2016. This brings the number to 10 Tier-2 manufacturers operating 11 facilities.

Table 6. Tier-2 Manufacturers Requesting & Receiving Funding in 2016

	Parent Company	City	State	Status
1	American Fiber Cushion	Dalton	GA	Active; CARE grant recipient
2	Bonded Logic	Chandler	AZ	Active
3	M. Chasen & Son, Inc.	Irvington	NJ	Active; began reporting May 2016
4	CLEAR	Lake Villa Lincoln	IL CA	Active; opened second facility in CA in April 2016; CARE grant recipient
5	Columbia Recycling Corp.	Dalton	GA	Active
6	Fiber Commercial Technologies	Juniper	FL	Active; begin reporting in November 2016
7	GeoHay, LLC	Inman	SC	Active
8	MP Global Products LLC	Norfolk	NE	Active
9	Reliance Carpet Cushion	Vernon	CA	Active
10	Shaw Industries Group, Inc.	Dalton	GA	Active

Tier-2 manufacturer payouts also increased significantly in 2016, an 84% increase from \$2.78 million in 2015 to \$5.11 million in 2016 (See Figure D). This increase is due to two factors: a 51% increase in total non-nylon pounds used in manufacture of secondary products over 2015 (See Figure S in Section 5.11), and an increased payout value of Tier-2 subsidies, from \$0.12/lb in early 2015 to \$0.25/lb as of Q3 2015. In 2016, Tier-2 manufacturers earned \$674 thousand in growth incentive funds representing 13% of Tier-2 subsidy payouts. The Tier-2 growth incentive is discontinued as of January 1, 2017.

Figure D. Tier-2 Manufacturer Payouts Over Time*

*In some cases, manual adjustments are made to payouts after reports are submitted by participants; Figure D does not include these adjustments. The adjustments were included in the Program's 2016 quarterly reporting to the SPC, SFOC, and CalRecycle. Adjustments include, but are not limited to, deductions for late membership fees, self-reported errors, and errors in reporting found through AUPs.

4.6 International Recycling Facilities

A small amount (1,136 tons) of whole carpet is exported outside the United States to international recycling facilities. These facilities are primarily located in Asia, India, and Europe, although markets fluctuate over time. In 2015 and 2016 demand from Asian markets declined, especially China, putting increased pressure on the already challenged carpet recycling marketplace. The California Program does not provide any support for international recycling facilities and no incentives are paid for PCC exported and processed outside the United States. CSEs

are compensated for pounds sold and shipped internationally. However, based on Tier-1 processor visits to these international facilities, it can be assumed that portions of the exports are recycled overseas. For the purposes of the Program, all reported whole carpet exports are considered diverted from California landfills, although as the final disposition of these materials is unknown, exports are not included within recycled output estimates. Recycled output processed in California or the United States is eligible to receive subsidies; the finished recycled output may be used by domestic or international secondary product manufacturers.

In 2016, 56% of the total subsidies were paid to California-based operations. The balance (44%) was paid outside of California. No subsidy funds were paid outside the United States.

4.7 Capacity

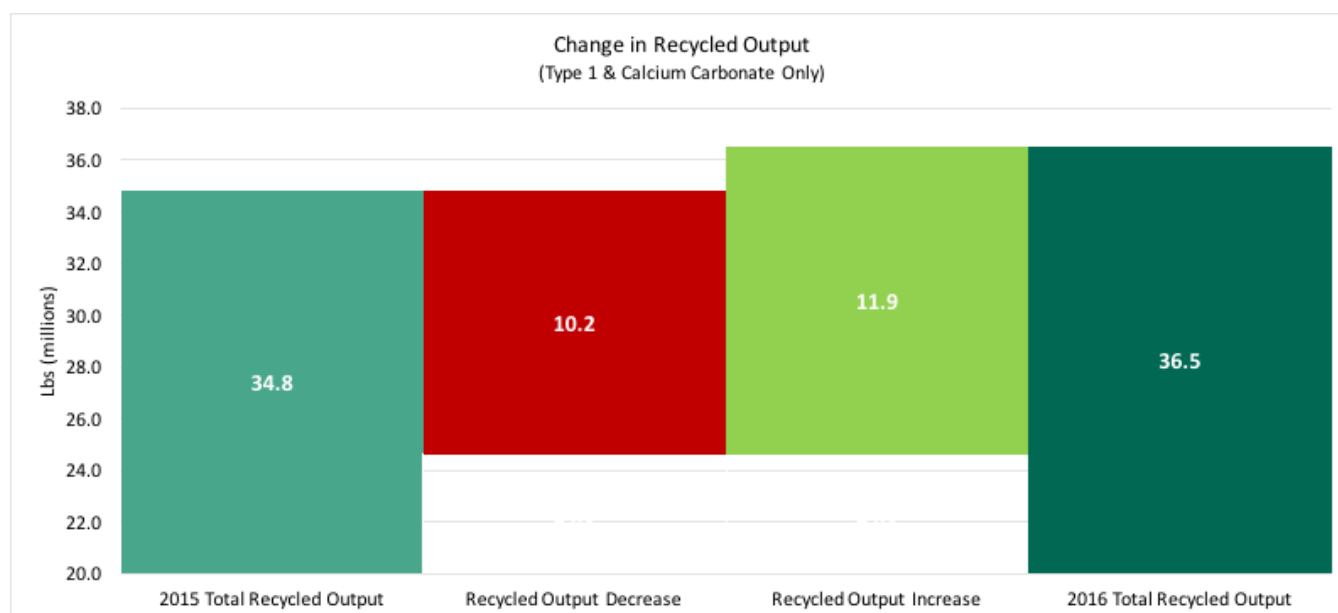
For this report, capacity is defined as the estimated volume of carpet discards that can be processed by participating Tier-1 processors in the marketplace. This measurement is based on self-reported figures and permitted capacity figures. Capacity is generally presented in tons per year (TPY), per the CalRecycle Facility definitions.

In 2016, seven out of twelve processors responded to the survey. The total maximum capacity as self-reported by processors is 326 million lbs/year (163,000 tons/year), or 95% of total California estimated 2016 discards of 343 million lbs (171,500 tons). Accounting for the closure of one facility in 2016 results in a capacity of 242 million lbs (121,000 tons), or 71% of 2016 discards. The maximum capacity in California (based on the three California-based processors) is 156 million lbs (78,000 tons), or 45% of 2016 discards. Additional California capacity is expected to come on line in 2017.

The total capacity used in 2016, based on these seven self-reports, is 186 million lbs/year (93,000 lbs) or 54% of 2016 discards. The total capacity used in 2016 in California alone is 73 million lbs (36,500 lbs), or 21% of 2016 discards. It should be noted that reported capacity figures reflect capacity which may be used to support carpet recycling flows both in and outside of California, such that available capacity to support California throughput may fluctuate over time with changes in domestic market PCC supply and demand and individual business practices.

Capacity varies as CSEs, Tier-1 processors, and Tier-2 manufacturers enter/leave the market or expand/downsize their operations. In 2016, there was an increase in capacity due to a Tier-1 processor establishing a new operation in California, enabled in part by a 2016 Cycle 1A capital improvement grant and new subsidies added in 2015. Although this facility represents a significant increase in capacity, the significant slowdown of processing at another processing facility during the term nearly offset all gains achieved with this new facility. Capacity is also directly related to demand for product. As the Program is able to increase demand from Tier-2 manufacturers, Tier-1 processor excess capacity can be consumed. As demand declined in 2016, some facilities adopted reduced capacity operation models. One Tier-1 processor closed, and another has been reconfiguring operations due to declining market conditions. A third processor made major efforts to build capacity in 2016, while a potential new processor is being established. As these efforts take hold in the market, a significant increase in capacity is anticipated.

Figure E. Change in Recycled Output (2015 vs. 2016)*



**Figure E shows Type 1 and calcium carbonate pounds only; totals may be slightly different than other instances of reported recycled output in this report.*

4.8 Throughput

Per CalRecycle's Facility Information Toolbox (FacIT) Glossary, throughput¹ is defined as the total amount of material actually received at a facility for a specific activity (in TPY).

In 2016, Tier-1 processors and CSEs collected and managed approximately 53,602 tons of PCC. This is 6% more than the 50,423 tons of PCC collected in 2015.

2016 highlights:

- Reuse increased by 54%, from 301 tons in 2015 to 463 tons in 2016.
- 18,827 tons of Recycled Output (Reuse + Type 1 + Type 2) or 11% of the discards were recycled in 2016. The yield was 35% of the gross collections (indicating about one third of all material collected is converted to recycled output.) Recycled Output by weight increased 8% from 17,412 tons in 2015.
- Calcium carbonate Recycled Output saw a significant increase in 2016, with 1,206 tons up from 31 tons in 2015, a 3,790% increase.
- Carpet tile recycled increased 31%, from 856,000 lbs in 2015 to 1.1 million lbs in 2016.
- 80% of gross collections was diverted from California landfills via recycling or other diversion strategies.
- Carpet cushion/pad Recycled Output saw a slight decrease of 3,382 tons, down from 3,451 tons in 2015.

¹ <http://www.calrecycle.ca.gov/FacIT/Glossary.htm>

- Exports continued to drop from 3,923 tons in 2015 to 1,136 tons in 2016, a 71% decrease from 2015.
- Kiln was down 50%, from 6.85 million lbs in 2015 to 3.42 million lbs in 2016. WTE was down 23%, from 22.9 million lbs in 2015 to 17.6 million lbs in 2016.
- Process waste sent to landfill decreased slightly, from 11,209 tons in 2015 to 10,592 tons in 2016.
- Inventory increased 36% between Q1 and Q4 2016, from 5,041 tons at the beginning of Q1 to 6,834 tons at the end of 2016.

Over time, the Program seeks to increase yield to maximize recycled output for secondary use and to minimize the amount of processing waste material sent to WTE or landfill. Increasing the yield of carpet during the recycling process can have a significant impact on the program's total recycling and diversion rates, without increasing current gross collections. The new calcium carbonate subsidies are shown to play a significant role in increasing overall yield, increasing by more than 3,500% from 2015 to 2016, as new uses for this previously unrecyclable component of carpet backing takes hold. Increased subsidies, grants, and market development technical assistance support have been key factors in this increase.

Table 7 shows a summary of final disposition data for all gross collections managed by Tier-1 processors and CSEs.

Table 7. Summary of Throughput and Disposition² in Tons Per Year (TPY) in 2016

Summary of Throughput and Disposition in Tons Per Year*	(Q1) Beginning of Period	(Q2)	(Q3)	(Q4) End of Period	(2016) Full Reporting Period
Throughput (TPY)					
Gross Collected - Processors (TPY)	11,470	11,812	12,991	10,779	47,051
Gross Collected - by CSEs (TPY)	1,274	1,675	2,002	1,600	6,551
Total Gross Collected (Sum of Processor + CSEs)	12,744	13,487	14,993	12,378	53,602
Recycled Output (TPY)					
Recycled Output (TPY) (reuse, tile recycled, fiber, depoly, calcium carbonate, filler, carcass)	3,687	4,844	5,646	4,650	18,827
	9%	11%	12%	11%	11%
Recycled Output Yield (% conversion GC:RO)	29%	36%	38%	38%	35%
Inventory Whole Carpet + Processed (TPY)					
Beginning Inventory	5,041	6,472	6,279	6,406	5,041
Ending Inventory	6,561	7,053	6,374	6,834	6,834
Total Diversion (TPY)					
Reuse**	115	151	141	56	463
Tile Recycled**	198	23	141	198	561
Fiber / DePoly**	3,284	4,560	5,001	3,703	16,548
Calcium Carbonate**	40	110	362	694	1,206
Filler**	-	-	-	-	-
Carcass**	84	-	-	-	84
Kiln	457	342	484	425	1,708
CAAF	1	1	25	1	27
WTE	2,490	2,757	2,497	1,029	8,774
Exports	39	727	136	233	1,136
Carpet Cushion/Pad	674	846	1,026	837	3,382
Out-of-State					
Out-of-State	2,448	1,995	2,531	1,775	8,749
Disposal (TPY)					
Waste to Landfill	1,792	1,919	3,243	3,638	10,592
Incineration	-	-	-	-	-

*Metric definitions are current at the end of 2016. Definitions have evolved over time and may have been different in the past.

**Processed materials counted toward total Recycled Output (includes Reuse, Type 1 and Type 2 materials).

4.9 Disposition Facility Types

The California Program maintains records of the names and locations of facilities engaged in disposition methods, including the following facility types:

- CSEs: Collect and sort carpet discards (See Appendix 10.3)
- Tier-1 processors: Convert gross collections into recycled output (See Appendix 10.4)
- Tier-2 manufacturers (non-nylon): Utilize non-nylon recycled output in the manufacturing of secondary products (See Appendix 10.5) (*Note: Nylon Tier-2 manufacturers are not currently eligible for incentives and thus have no tracking mechanism in place for the disposition facility types they may use.*)
- Public drop-off sites supported by the California Program (See CARE [website](#) and Appendix 10.6)

Every Program participant receiving subsidy funds is required to maintain records regarding the facilities they use for each disposition method. This includes facilities that handle disposition for CAAF/Kiln processing, exports, cushion, reuse, WTE, and landfill/disposal. Each Program participant must record the disposition facilities used. These records are subject to periodic review and verification by the Program's third-party accounting firm Aprio in

² Gross collection tons are estimated by the processors and CSEs based on average weight of inbound loads. Thus, this table should not be construed as a true mass balance. Outbound tons are known more precisely since the agent is either being paid for each ton or they are paying for each ton to be managed/disposed.

line with AUPs. The California Program also has access to these confidential records through these periodic reviews, and requires regular reporting, recordkeeping, proper management practices, and random site visits for Program participants.

5 Program Goals & Activities – Section 18944(5)

Description of goals and activities based on stewardship plan. State goals from the approved plan, the baseline from which goals were measured, and report on achievement during period.

5.1 Introduction

Throughout 2016, the California Program demonstrated continuous meaningful improvement toward program goals aimed at stabilizing and recovering carpet recycling and diversion in California. Six fundamental goals continue to guide the program. Major metrics related to performance goals are summarized by year in Table 1. These metrics are compared to baseline year, defined by CalRecycle as the first 12 months of operation or July 1, 2011 to June 30, 2012. All other metrics in Table 1 are reported by calendar year as January 1 to December 31.

A brief summary of specific performance goals, major progress toward these goals, and related report sections providing additional information is presented in Table 8.

Table 8. Program Highlights & Progress

Goal	Related Sections	Major Progress
Increase Recyclability of Carpets	5.7 and 5.8	Continued improvement in recyclability: <ul style="list-style-type: none"> • Technical assistance and increases in the Calcium Carbonate Subsidy in 2015 resulted in more than 2.4 million lbs of this material recycled in 2016, up from over 61,000 lbs in 2015, representing 6.3% of total 2016 pounds recycled. • The Carpet Tile Recycling Subsidy implemented in Q2 2015 helped to recycle 1.12 million lbs of carpet tile in 2016, an increase of 31% from the 856,000 lbs in 2015.
Increase Reuse of PCC (post-consumer carpet)	5.6.1	Continued improvement to increase reuse: <ul style="list-style-type: none"> • The carpet tile/broadloom reuse subsidy implemented in Q2 2015, resulted in 926,000 lbs of PCC reused in 2016, a 51% increase over the 614,000 lbs in 2015. • 342,449 lbs of broadloom carpet reused in 2016, up 931% over 2015 (33,220 lbs).
Increase Gross Collection of PCC from California Landfills	4.2 and 5.5	Continued improvement in gross collections: <ul style="list-style-type: none"> • Gross collections increased 4% from 103 million lbs in 2015 to 107 million in 2016. • California Program drop-off locations were expanded to 33 drop-off sites servicing 33 counties, up from 23 sites in 22 counties in 2015.
Increase Recycled Output from Gross Collected PCC	5.5 and 5.6.2	Continued improvement in recycled output: <ul style="list-style-type: none"> • Increased recycled output to 38 million lbs in 2016, an 8.6% increase from 35 million lbs in 2015. • Increased recycled output rate (recycling rate) to 11%, up from 10% in 2015.
Increase Overall Net Diversion of PCC from California landfills	5.6 and 5.9	Continued improvement in landfill diversion: <ul style="list-style-type: none"> • An average of 25% of all PCC discards in 2016 were net diverted from California landfills, up from 23% of discards in 2015. • Diversion via Energy Recovery (sum of CAAF, Kiln, WTE) decreased 29% in 2016, falling from 29.73 million lbs in 2015 to 21.02 million lbs in 2016.
Increase Market Growth of Secondary Products made with Post-Consumer Recycled Carpet Content (PCRCC)	5.11 and 6	Continued improvement in market growth: <ul style="list-style-type: none"> • Tier-2 products shipped and sold were the highest to date, at 17.74 million lbs in 2016, up 51% from 11.79 million lbs in 2015. • Awarded Cycle 1A/1B grants to support capital investments and product testing, which will serve to increase the collection, recyclability, and utilization of California generated PCC; Launched new procurement grant Cycle 1C.

Program Data

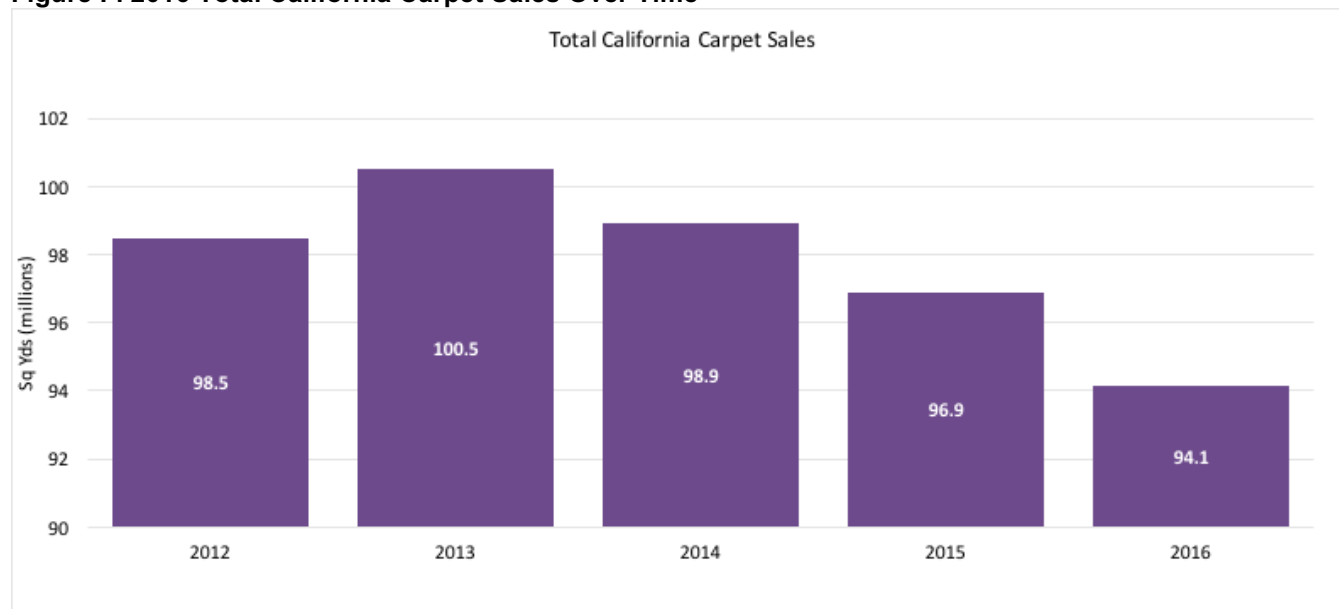
Results are tracked and monitored by the CARE California Stewardship Program (Program) on an ongoing basis and reported to CalRecycle quarterly, approximately 90 days following the end of each quarterly reporting period. Since the Program began, 22 quarters of data has been collected (July 2011 through December 2016), providing Program staff with the ability to track trends and progress toward Program goals over time. For the purposes of this report, results are presented for the four quarters of calendar year 2016, based on the best available data at the time.

5.2 Carpet Sales – Section 18944(5)(A)1

Amount of carpet sold by square yards and pounds, in the state during the reporting period that is covered under the approved stewardship plan. CSO with more than one manufacturer may use average weight.

In 2016, reported annual carpet sales (94.1 million sq yds) were down compared to reported sales in 2015 (96.9 million sq yd). Sales in spring and summer (Q2 and Q3) were higher than fall and winter (Q4 and Q1), consistent with typical seasonal fluctuations. Q4 sales in 2016 were 21.9 million sq yds, the lowest in Program history (See Figure F).

Figure F. 2016 Total California Carpet Sales Over Time



- Total Carpet sales in 2016: 94.1 million square yards (404.2 million lbs³)
- Quarterly equivalent: 23.5 million square yards (101.1 million lbs)
- Sales recorded since 2012: 488.9 million square yards (1655.4 billion lbs)

Note: CARE will be examining average weight per square yard in 2017, specifically as it relates to California sales.

5.3 Carpet Discards – Section 18944(5)(A)2

Amount (pounds) of PCC that is available for collection.

In 2016, an estimated 343 million lbs of PCC were destined for landfills and available for collection in California. Of these calculated discards, approximately 107 million lbs were gross collected from California landfills (approximately 31%). Since the program began, gross collections have ranged from 28-34% of discards.

Discards reported during 2016 are estimated using the calculation methods outlined in Section 5.13.1.

³ Weights are based on industry reported averages per square yard of carpet, estimated at 4.39 lbs per sq yd starting as of Q3 2016 (an increase from 4.2 lbs per sq yd).

5.4 Source Reduction – Section 18944(5)(A)3

Amount (pounds) of carpet source reduced, if measurable.

The California Program uses the average weight of carpet as its primary source reduction metric. CARE conducts an annual confidential survey of carpet mill participants to ascertain the average weight per square yard for commercial tile, commercial broadloom, and residential broadloom carpet. From program inception through Q2 2016, the average weight of carpet reported—4.2 lbs per sq yd—did not change. This made it difficult to use this as a dependable benchmark to measure source reduction.

In 2016, results from the survey indicated a 4.5% increase in the average weight per square yard to 4.39 lbs/sq yd. Although the reason for this increase is not known, factors which may have contributed to this increase include the continued shift from broadloom to tile in the commercial sector, and possibly a shift from lower weight builder grades to vinyl plank flooring, thus reducing the volume of lighter weight goods. Further study of these factors and impacts is planned for 2017. These reported averages were also used to update the 2016 discard formulas, effective Q3 2016, which can be found in Section 5.13.1, Tables 13a and 13b.

5.4.1. Carpet Mills and Source Reduction

Carpet mills are also developing innovative approaches to sustainability that will have positive impacts on carpet recycling efforts and source reduction in years ahead. These innovative advances typically take five to ten years from conceptualization to commercialization before benefits are fully realized, but as they take hold in carpet mill product lines, results will benefit both source reduction and overall recyclability of carpet. One example is the development of an innovative backing system that will greatly facilitate the recycling of both PET and nylon carpet. This new technology, launched in 2016, offers mono-polymer and easily separated dual-polymer systems that will eliminate calcium carbonate and contribute greatly to source reduction in coming years—reducing weight per square by approximately 40%. Another example is the separation of nylon face fiber from a polyethylene terephthalate (PET) backing system that will greatly improve processing efficiency. The companies working in partnership to develop this [technology](#) were [DSM-Niaga](#) throughout 2014 and 2015 (See Section 5.7).

A number of carpet mills have dedicated efforts to minimize the environmental impact of carpet manufacturing, reducing their reliance on natural resources to make new carpet. Examples include:

- Mohawk, working with DSM-Niaga, launched Air.O, a new product line composed of 100% PET, in 2016. With no polypropylene backing, no latex adhesive, and no calcium carbonate filler, this product offers reduces material inputs at the source while increasing recyclability at the end of life (See Section 5.7).
- Bentley Mills is producing a new carpet with a yarn weight of 20 ounces per sq yd, reducing the overall material input, increasing recycled content, and minimizing the potential waste going to the landfill.
- Masland Contact has reduced the backing weight of their module tiles by 40%, and have begun utilizing 53% post-consumer and post-industrial recycled material. They are also currently developing products with yarns consisting of 75% recycled pre-and post-consumer carpet fibers.
- Shaw Industries increased the use of calcium carbonate in its EcoWorx-backed carpet tile to increase the product's reuse capabilities, and has developed a new carpet tile, StrataWorx, that use 40% less material than Shaw's current leading carpet tile platform. Shaw is also in the process of installing equipment to increase its capacity to recycle post-consumer carpet tile into new tile.
- In 2016, Interface, Tandus, and Shaw reported using California recycled PCC content in various quantities in one or more product lines. Additional carpet mills may use recycled PCC content generated from other locations throughout the United States. Currently it is difficult to quantify California derived material percentages for individual product lines, although efforts are underway to this end.

- Interface currently offers many product lines with recycled content far above NSF-140 Platinum standards, some as high as 80% post-consumer recycled content. For the purposes of the Cycle 1C grant program (See Section 6.2.1 Grant Program), Interface identified ten product lines with California recycled PCC in excess of 10%. See product listing at carpetrecovery.org/products/.

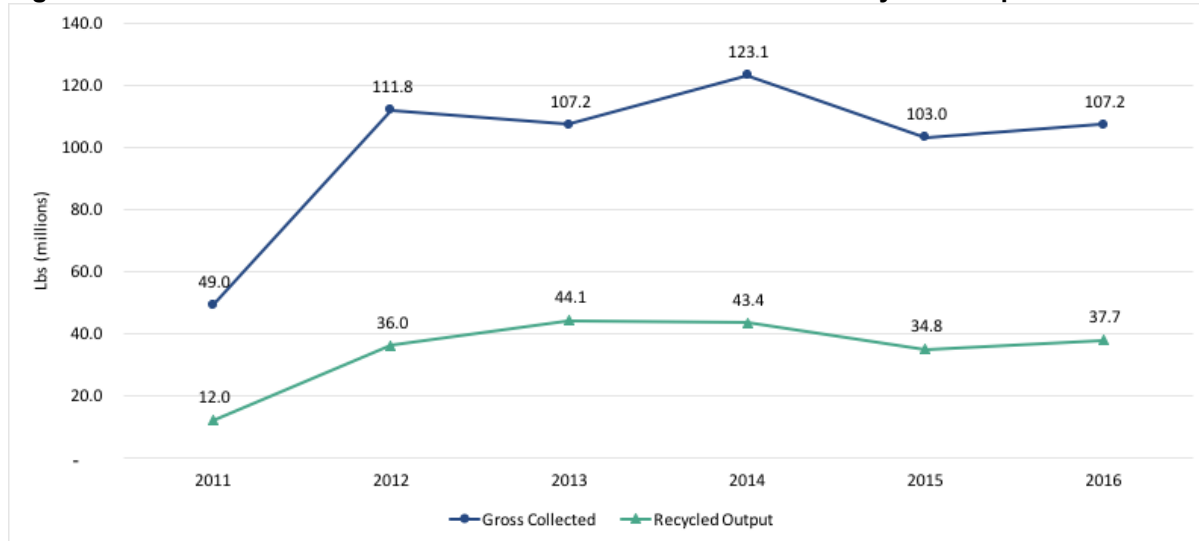
Both CARE and the California Program recognize the importance of these efforts and are encouraged that these innovations contribute to a more sustainable industry. More information can be found in the [CARE Annual Report](#), which examines source reduction across the United States.

5.5 Increasing Gross Collection – Section 18944(a)(5)(A)4

Amount (pounds) of PCC collected, by weight, during the reporting period.

Gross collection figures⁴ include estimated pounds of PCC removed from the waste stream and initially kept out of the landfill for reuse, recycle, Carpet as an Alternative Fuel (CAAF), Kiln, or Waste to Energy (WTE) through collection, sorting, and processing activities conducted in coordination with consumers, retailers, installers, landfills, transfer stations, and material recovery facilities (MRFs). In 2016, the Program saw a 4% total annual increase in estimated gross collections (103 million lbs in 2015 to 107.2 million lbs in 2016), making up 31% of estimated annual discards (See Figure G).

Figure G. Annual Performance Trends for Gross Collections and Recycled Output Over Time* **



*Consistent with the 2014 CARE California Carpet Stewardship Program Annual Report, recycled output includes only Type 1, Type 2, and calcium carbonate (used as a raw material) pounds. Pounds diverted from landfill through international shipments, CAAF and/or Kiln and WTE are reported within pounds diverted.

**2015 gross collections and 2015 recycled output reported in the 2015 CARE California Carpet Stewardship Program Annual Report have been corrected in this report.

⁴ Gross collections figures in 2016 include both participating Tier-1 processor data (94 million lbs) as well as additional California PCC (13 million lbs) collected and managed by CSEs, as reported to CARE via a monthly reporting process. Gross collections may be estimated based on average weights, whereas disposition figures are based on precise weights of materials managed.

Since program inception in July 2011, a cumulative total of 601 million lbs of PCC (31% of discards) has been gross collected to date. Of this, 208 million lbs or approximately 35% was converted into recycled output since July 2011. Over the same period, 81% of gross collections were net diverted from landfill totaling an estimated 486 million pounds, inclusive of recycled output.

5.5.1 Gross Collection Activities

To support collection challenges presented by collector/sorter entrepreneurs (CSEs), increase program awareness, and encourage participation, the California Program implemented the following gross collection activities:

- Enhanced California-dedicated team, with the addition of **a new full-time Senior Associate**, primarily to focus on expanding and improving drop-off site service in southern and central California.
- State recycling coordinator outreach, including meeting with 78 local government and private waste facilities representatives throughout the state to distribute promotional materials and support increased collections.
- Extensive local government outreach, resulting in **10 new drop-off sites** supporting 10 county participants
- Augmented total of California Program drop-off sites in 2016 to **33 participating drop-off sites**, an **increase of 44%** from 2015, although falling 47% short of the 2016 goal of 42 drop-off sites.
- To increase collections at retailer locations, reached 72% of active California retailers via 975 on-site visits and 175 phone visits (See Section 8.3).
- Distributed promotional materials to **installer/contractors** to increase program awareness and recycling options available.
- Conducted 2 **full-day stakeholder workshops** in March 2016 in California.

In 2016, the California Program made significant progress in outreach and engagement with stakeholders involved in carpet collection. More details surrounding these and other activities can be found in Section 8.

5.6 Disposition – Section 18944(a)(5)(A)5

Disposition, that is, amounts reused, recycled, incinerated for energy recovery or disposed of in a landfill; of collected PCC, by pounds, during the reporting period.

Reported 2016 disposition includes reuse, recycling (recycled output), energy recovery, exports, and environmentally safe landfill disposal. All data presented in this section is based on CSE, Tier-1 processor, Tier-2 manufacturer, and carpet mill data submitted to the California Program and the Program's third party accounting firm (Aprio), and does not reflect any disposition activities occurring outside the Program. National data is provided by Program members, as reported in CARE's annual survey. (Disposition is summarized in Section 4.8.)

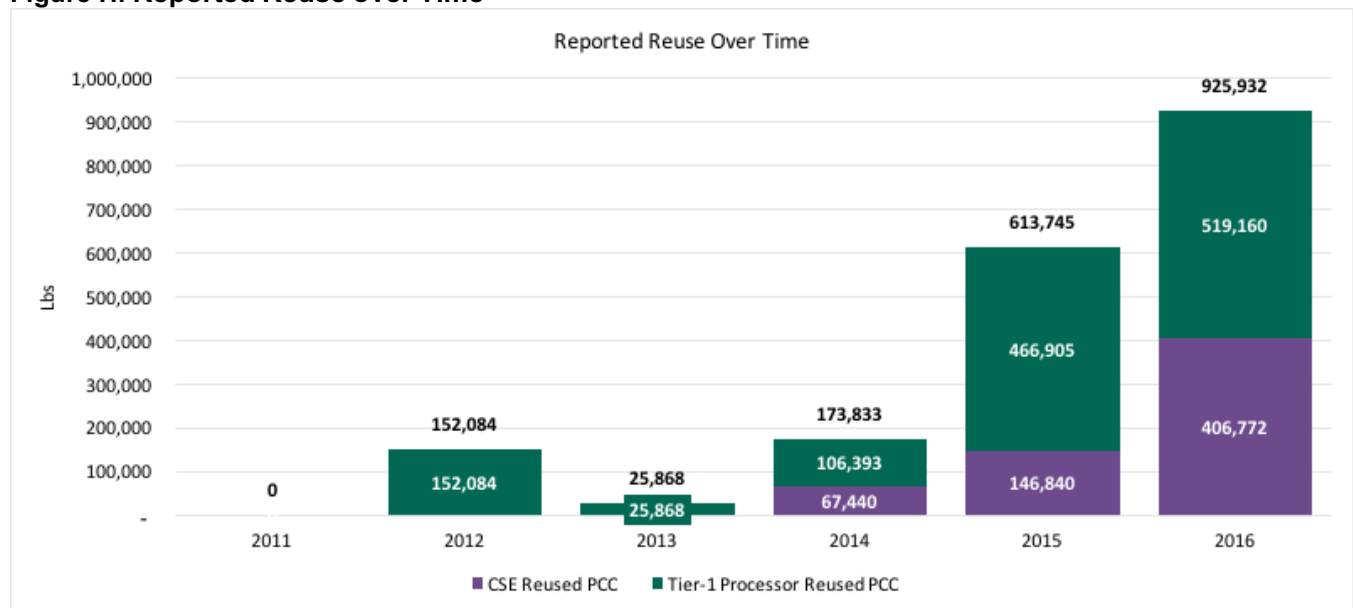
5.6.1 Reuse

Reuse comprises a small but growing portion of total annual carpet discards and has historically been difficult to track reliably. In Q2 2015, the California Program responded to the decline in reuse in 2013 by implementing the carpet tile/broadloom reuse subsidy to promote the reuse of carpet tile and broadloom in line with the waste hierarchy.

The incentive is aimed at CSEs and Tier-1 processors—two stakeholders that serve on the front lines of carpet recovery and are best positioned to sort materials and identify best opportunities for reuse. By the end of 2016, the Program was able to increase the total pounds diverted via reuse from 613,745 lbs in 2015 to 925,932 lbs in

2016 (see Figure H), representing more than an 800% increase over the baseline year of 98,000 lbs. Reuse in 2016 was 0.86% of gross collections, 0.27% of discards, and a 51% increase from 2015—significant meaningful progress in this goal area.

Figure H. Reported Reuse over Time



The carpet tile/broadloom reuse subsidy implemented in Q2 2015 reflects the first time that the California Program has been able to reliably report on the reuse stream for carpet tiles and broadloom. The standard size of carpet tiles and the ease of which various styles and colors can be mixed and matched were also factors in making tiles desirable for reuse applications. Carpet tile reuse totaled 583,483 pounds and made up 63% of all reported reuse in 2016. Carpet tile recycling in 2016 remained flat, at 2,958 lbs over the 2015 level of 580,525 lbs.

Broadloom carpet is a much more challenging material to reuse than carpet tile because it is often cut to size, comes in many colors, designs, and styles, and is hard to clean or refurbish. However, there are some opportunities for reuse, especially when the carpet is relatively new and has experienced low traffic. There is often high demand for gently used carpet from local community organizations, such as Habitat for Humanity. For Q4 2015, the California Program reported its first pounds of broadloom sold, donated, or shipped for reuse totaling 33,220 lbs. In 2016, this new market grew 931% over 2015 to 342,449 lbs. Tier-1 processors reported 100% of the 2016 broadloom reuse.

5.6.2 Recycled Output

Recycled output includes the portion of gross collected PCC after processing (e.g. shredding, shearing, hammer milling, and de-polymerization) that is shipped and sold as material to be used in the manufacturing of secondary products made with post-consumer recycled carpet content. The Program's recycled output is calculated as the sum of all Type 1 and Type 2 recycled outputs (including calcium carbonate and carcass), plus reuse. In 2015, CARE adopted a policy to add reuse to the calculation for recycled output, per Addendum 3. As of January 2016, the Program incorporated this modified calculation into recycled output figures moving forward. CAAF and Kiln are not considered in the recycled output calculation, but are incorporated within Program diversion figures.

Recycled output for 2016 was 38 million lbs, an 8.6% increase from the 35 million lbs reported for 2015. Recycled output as a percentage of total discards increased slightly, from 10% in 2015 to 11% in 2016, although fell short of the 16% 2016 goal. (See Section 2 – Table 1). Since the Program’s inception in July 2011, a cumulative total of 208 million lbs of PCC (11% of discards) have been recycled.

Further information about the efforts to increase recycled output can be found in Section 5.8, Increasing Recycled Output.

5.6.3 Incineration

No incineration was reported in 2016, nor since the Program began.

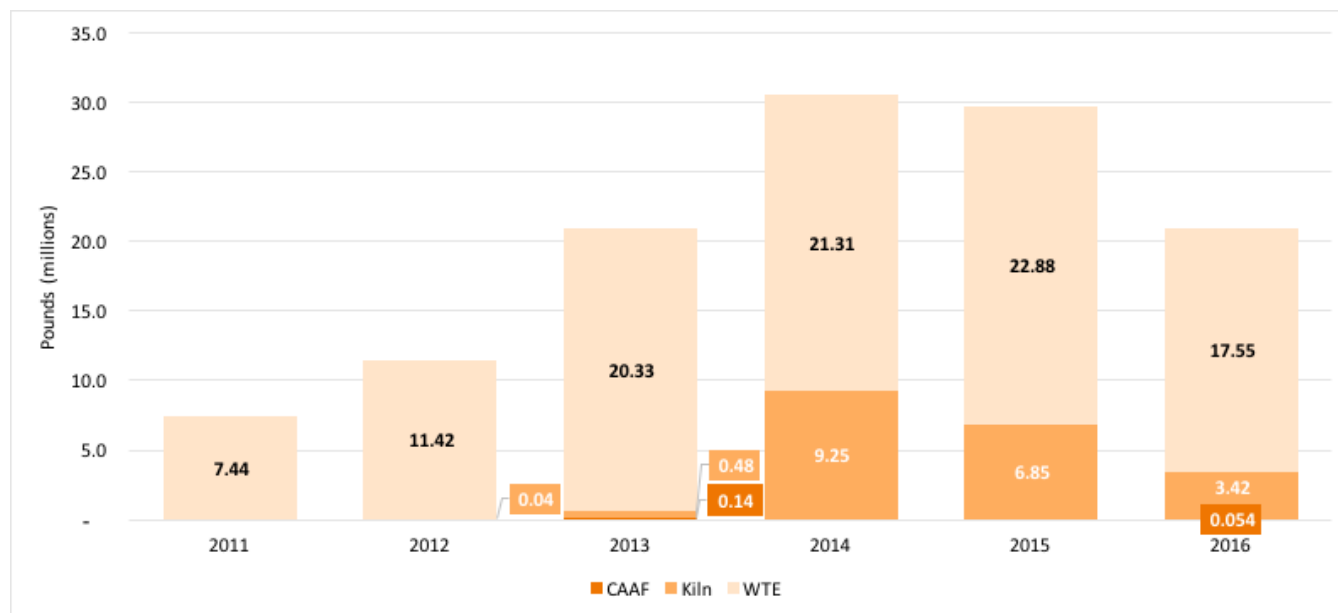
5.6.4 Energy Recovery

The California Carpet Stewardship Plan 2011-2016 (2011-2016 Plan) enables the management of PCC in a manner consistent with the state’s solid waste hierarchy and AB 2398 requirements. Two categories of energy recovery methods are used to manage PCC not diverted through reuse, recycling, or international sales:

- CAAF and Kiln, which both qualify for subsidies under the 2011-2016 Plan. CAAF refers to carpet’s use as an environmentally safe engineered fuel. Kiln refers to the use of PCC as a fuel substitute in cement kilns and other high-temperature processes.
- WTE, the process of recovering thermal energy from PCC through combustion. Although WTE is not supported by Program subsidies at this time, it does provide an alternative to landfill for unrecyclable portions of the PCC waste stream.

Energy recovery decreased in 2016, in line with the long-term Program goal to show increased use of strategies higher on the waste hierarchy as recycled output takes hold. When combined, CAAF, Kiln, and WTE accounted for 21.02 million lbs in 2016, compared to 29.73 million lbs in 2015, a decline of 29% (See Figure I). In 2016, energy recovery represented approximately 24% of net diversion, compared to 37% of net diversion in 2015.

Figure I. Energy Recovery over Time



5.6.4.1 CAAF and Kiln

In 2016, CAAF usage was 0.05 million lbs, up from 0 lbs in 2015. 3.42 million lbs of PCC were diverted via Kiln, compared to 6.85 million lbs diverted via Kiln in 2015, a 50% decrease. The use of Kiln is still significantly below the threshold quarterly cap of 15% on CAAF and Kiln subsidies set in the 2011-2016 Plan. To date, a combined \$511,017 has been invested in energy recovery subsidies for CAAF or Kiln, representing 1.9% of total subsidy payouts since the Program began. In 2016, the combined subsidies paid out for CAAF and Kiln fell to \$104,130, representing 1% of total subsidy payouts. Diversion of CAAF was 0.02% of discards, while Kiln was 1% of discards, down from 2% in 2015.

5.6.4.2 Waste to Energy (WTE)

In 2016, 17.55 million lbs of materials (5% of discards) were processed as WTE. This is a decrease of 23% over the 22.88 million lbs (7% of discards) processed as WTE in 2015 (See Table 9). This decrease appears to be due in part to reduced available capacity, rather than reduced demand for WTE as a beneficial use.

PCC disposed as WTE is typically unusable material resulting from the recycling process that would otherwise be sent to the landfill. Although WTE is not considered recycled output, it can be viewed as PCC diverted from landfills inside and outside of California. WTE is not part of the subsidy program, but is considered by the Program to be higher use than going to the landfill and provides greater economic value to CSEs and Tier-1 processors.

Table 9. Energy Recovery by Method

Reuse	2015 (millions of lbs)	2016 (millions of lbs)	Change (millions of lbs)	Change (%)
Kiln	6.85	3.42	(3.44)	-50%
CAAF	-	0.05	0.05	-
WTE	22.88	17.55	(5.33)	-23%

5.6.5 Disposal

Disposal is calculated as the balance of discards (343 million lbs) minus gross collections (107 million lbs), plus net sorting and processing waste sent to landfill (21.2 million lbs).

In 2016, total disposal was 257 million lbs of PCC, up 3% from 265 million lbs in 2015. (Note that some additional diversion may be occurring due to untracked reuse or other upstream processes outside of the California Program reporting processes. This diversion may have a slight impact on the actual pounds sent to landfill.)

In 2016, California Tier-1 processors reported the total processor pounds sent back to landfill as 21.2 million lbs, down 5% from 22.4 million lbs in 2015⁵ (See Section 2 – Table 1). Materials sent to landfill are generally classified as unusable PCC materials collected during the gross collections process or generated as an unusable byproduct of production or processing that is not converted to recycled output, utilized in, or managed through an energy recovery, CAAF, Kiln, or WTE utilization process.

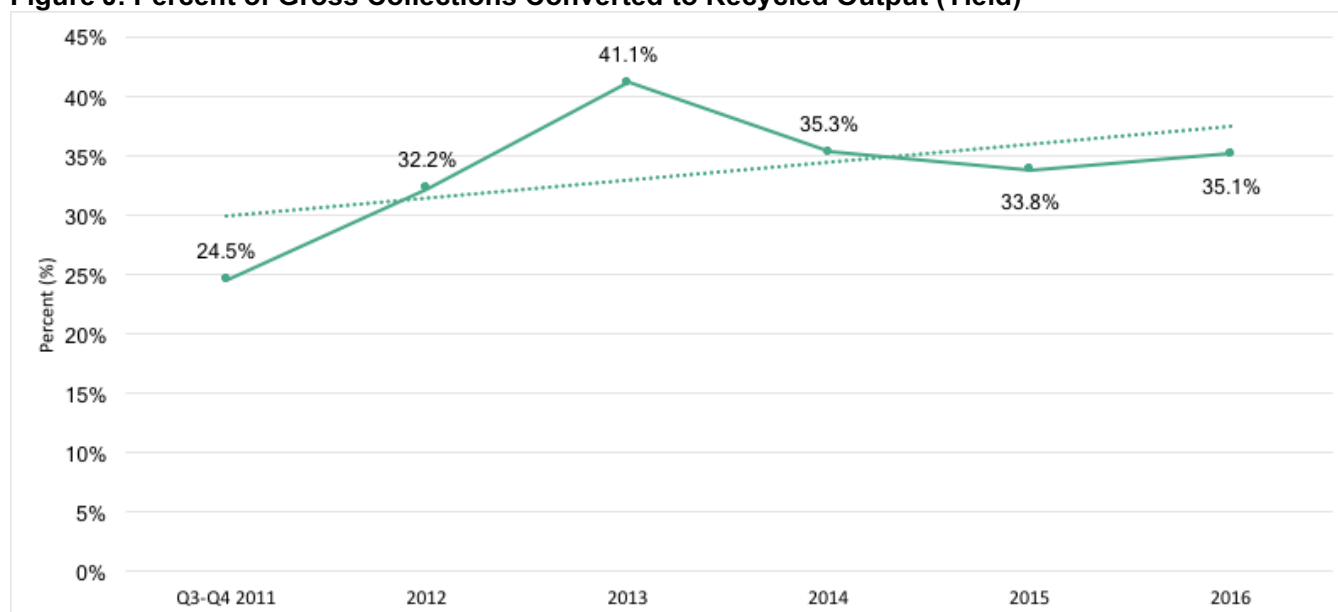
⁵ The 2015 CARE California Carpet Stewardship Program Annual Report did not include pounds reported by CSEs in Q2 2015 in the annual calculation of waste sent to landfill; this error has been corrected in this report.

5.7 Increasing Recyclability – Section 18944(5)(A)6

Describe efforts to increase recyclability of carpets.

Yield is calculated as the percent of gross collections converted to recycled output. Overall recyclability as indicated by yield figures increased this year to 35.1% of gross collections, compared to 33.8% in 2015. This rate is 6% below the high of 41.1% achieved in 2013 (See Figure J). The Program projects as the recycling of backing materials increases, yield will increase significantly.

Figure J. Percent of Gross Collections Converted to Recycled Output (Yield)



Under the Program, CARE relies on carpet mills as the primary driver for long-term design improvements in the recyclability of carpet and carpet tile. Due to the long research and development timelines for these technologies, the 2011-2016 Plan considers these efforts to be outside of the Program's control. Program recyclability efforts in 2016 were focused on increasing yield and supporting development of secondary products that use recycled outputs, primarily through technical assistance to CSEs, Tier-1 processors, and Tier-2 manufacturers.

CARE works to identify, qualify, and report on technologies that may significantly improve carpet recyclability over the long-term. Developments during the reporting period include:

- One major carpet manufacturer, Mohawk, introduced Ari.O carpet in 2016. This product is composed of 100% PET so there is no polypropylene backing, no latex adhesive, and no calcium carbonate filler. The product is completely recyclable and is designed for sustainability. The same basic technology is applicable to nylon face fiber carpet through a thermal separation mechanism. Commercial introduction is anticipated in the next one to two years. Other industry efforts are underway, but due to competitive reasons cannot be disclosed in this report.
- Incorporation of recycled carpet content back into face fiber remains challenging. In 2016, CARE identified more than 60 technologies that could be applicable to carpet. At present, only a few are deemed to be both technically and economically viable and perhaps only one or two are closed-loop technologies. CARE will continue to support and follow these developments, including encouraging companies to bring these

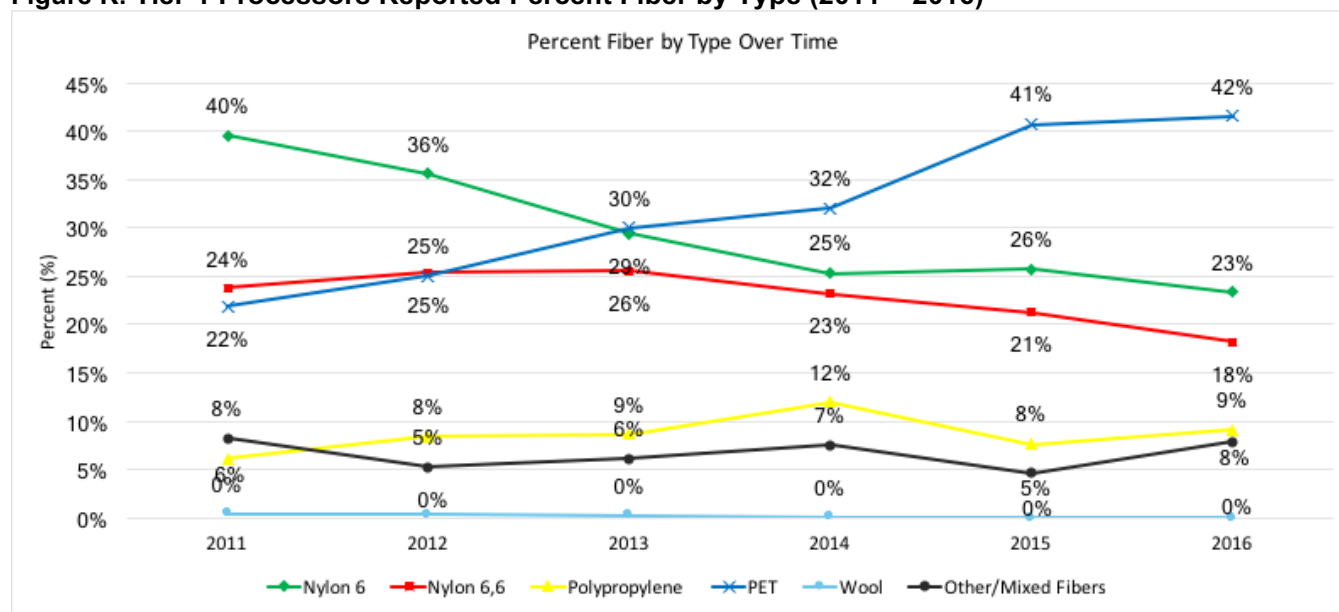
technologies to California through efforts involving grants, consultation, networking with key candidates in the state, and facilitating meetings with the Governor's Office of Business and Economic Development (GO-Biz) and Recycling Marketing Development Zones (RMDZ).

Another factor in recyclability involves the variety of polymers used in the construction of carpet products and the ease by which materials can be recycled at end of life.

- In 2016, CARE and the [Carpet and Rug Institute](#) (CRI) began an industry-funded back-stamping initiative that involves stamping polymer identification information on the back of new carpet. The initiative is being rolled out across the industry, with the first back-stamped products coming off the manufacturing line in late 2016. Over time, this will make it easier for CSEs to identify carpet polymer types at the end of life as these products make their way to market, fulfill their useful product life and are torn-out for recycling, generally seven to ten years after sale. The full impact of this program will take a number of years to affect the PCC flow resulting from tear-outs, but this forward-looking initiative represents meaningful progress in the goal of recyclability.

Of the discards gross collected in 2016, Tier-1 processors reported percentage of each polymer by fiber type. PET fiber materials stayed the same, from 41% in 2015 to 42% in 2016. At the same time, nylon fiber types (nylon 6 and nylon 6,6) continued to decline from a combined 47% (26% nylon 6 and 21% nylon 6,6) in 2015 to 41% (23% nylon 6 and 18% nylon 6,6) in 2016. It is generally expected that this downward trend will continue as buyers continue to embrace low cost PET carpet. Polypropylene (PP) fiber stayed roughly the same, increasing just slightly from 8% in 2015 to 9% in 2016. The Program expects it to remain steady at under 10%. Wool and other fibers remain a relatively low and insignificant portion (<1%) of the PCC waste stream (See Figure K). Note that the face fiber percentage breakdown is only an estimate and may vary considerably based on which fibers move in the marketplace. Overall, industry shipments indicate PET and nylon (both types 6 and 6,6) are approximately equal in 2016.

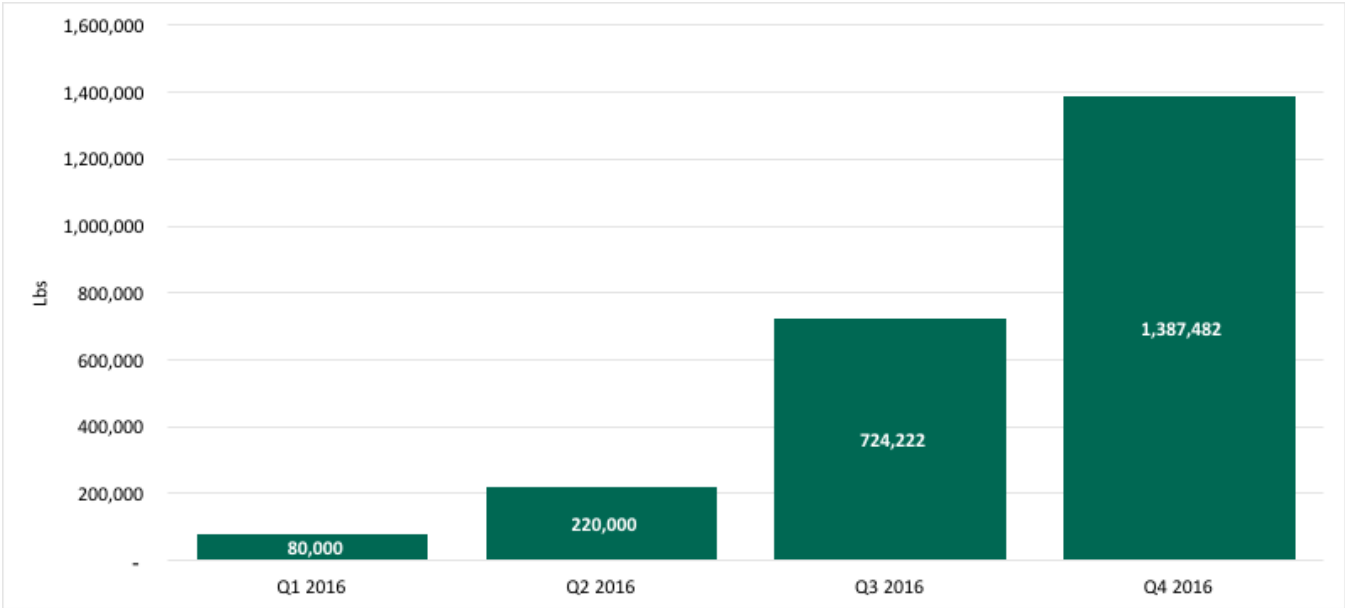
Figure K. Tier-1 Processors Reported Percent Fiber by Type (2011 – 2016)



In 2016, the California Program made a number of changes to help stimulate the amount of gross collections being converted and utilized as recycled output through the following incentives:

- 1. **Calcium Carbonate Subsidy:** The increase of the calcium carbonate incentive from \$0.12/lb to \$0.17/lb for Tier-1 processors in 2016 led to an increase of recycled output of this product, with more than 2.4 million lbs of this material recycled in 2016, up from only 61,000 lbs in 2015 (See Figure L).

Figure L. Calcium Carbonate Pounds in 2016



- 2. **Grant Program:** The grant program was launched in Q4 2015 to support capital improvement and product testing by CSEs, Tier-1 processors, and Tier-2 manufacturers. The Program sent grantees notifications of awards in March 2016. In part, the grants are intended to catalyze development in new market areas, which will improve recyclability of previously underutilized or difficult to recycle components of PCC (See Section 6).
- 3. **Non-Nylon Subsidy and Growth Incentive:** Since the Program began in 2011, the Program has experienced a rapid rise in the amount of PET carpet discards. In direct response to PET's low recyclability compared to nylon, the Tier-2 manufacturer non-nylon subsidy established in 2013 was increased to \$0.25/lb in Q3 2015 with a \$0.10/lb growth incentive for pounds over a specified quarterly threshold. As pounds increase, the quarterly threshold is adjusted. In Q3 2016, the threshold was raised to 3.5 million pounds per quarter. The subsidy and incentive continued to have an impact in 2016, with 17.7 million lbs of Type 1 non-nylon recycled output sold and shipped by Tier-2 manufacturers, a 50% increase over 11.8 million lbs in 2015 (See Section 5.11 – Figure S). Since the market was successfully stimulated for PET consumption, the growth incentive was deactivated as of December 31, 2016.

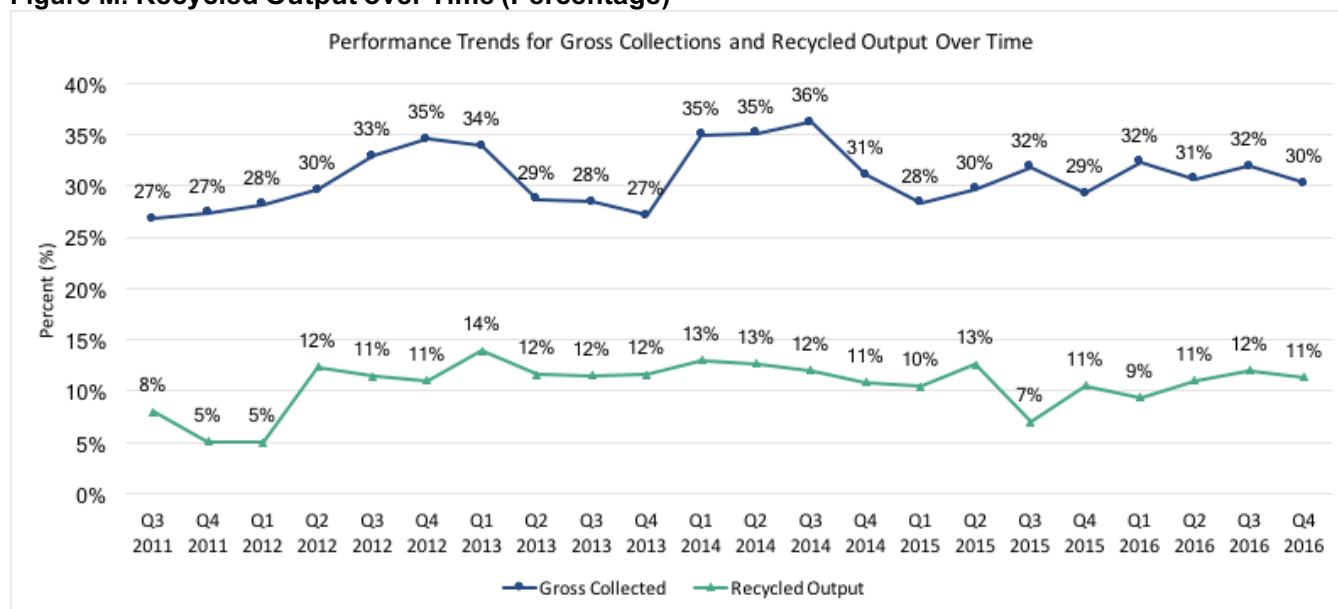
5.8 Increasing Recycled Output – Section 18944(5)(A)7

Describe efforts to increase recycling of PCC.

Recycled output comprises the portion of gross collections that is successfully converted from PCC to an end-use product, or input material for a secondary product. The Program utilizes a subsidy structure that compensates Tier-1 processors based on the number of pounds of materials converted to recycled output, and Tier-2 manufacturers based on how much recycled output they use in their recycled content products. These subsidies play an important role in stimulating short-term growth as well as stabilizing the overall industry during times of change.

Recycled Output Rate (recycled output as a percentage of total discards) increased slightly in 2016, from 10% in 2015 to 11%. The lowest quarter of the past four years occurred in Q3 2015 at 7% Recycled Output. The same period in Q3 2016 increased five percentage points to 12%, the highest quarter recorded for 2016. Although the Program fell short of the 2011-2016 Plan's stated goal of 16% by 2016, the Program has stabilized following the difficult market conditions experienced in 2015 (See Figure M).

Figure M. Recycled Output over Time (Percentage)



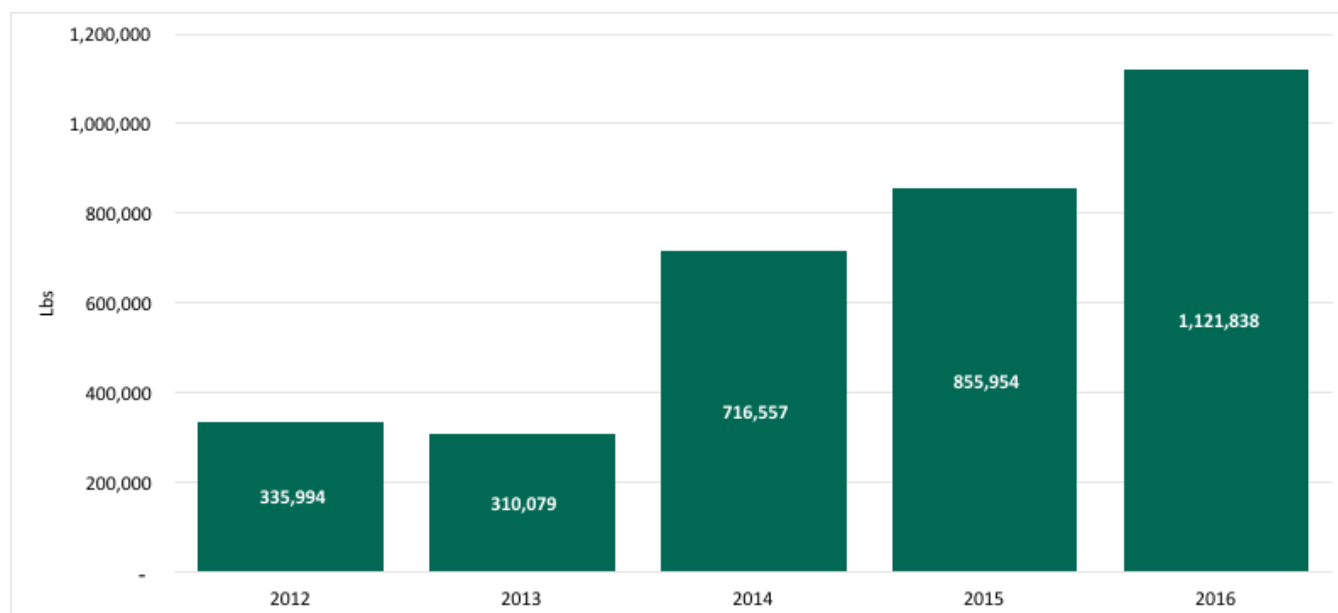
As described in Section 6, grants awarded in 2016 resulted in significant net new recycled output in California. However, grant-stimulated increases from new or expanded Tier-1 processor throughput, as well as increased demand by Tier-2 manufacturers, were almost fully offset by throughput declines from two existing processors over the same time frame. For instance, the closure of the Evergreen plant in 2015 greatly reduced reported depolymerization of California-generated PCC from several million pounds annually in prior years to zero lbs in 2016. Increases in fiber recycled output from the new Ringgold plant also came to a close in 2016, while reduced demand from Asia led to a 60% reduction in throughput from another California-based processor. Overall, nearly all gains in new recycled output in 2016 were offset by lost throughput over the same period. As markets continue to develop, new recycled output capacity holds promise for increased recycled output in future years.

The largest component of recycled output in 2016 continues to be fiber, which composed 87.9% of total recycled output in 2016, down slightly from 90.2% in 2015. Depolymerization dropped from 7.2% of total recycled output in 2015 to 0% in 2016, carcass increased slightly from 0% of total recycled output in 2015 to 0.4% in 2016, and filler stayed at 0%.

Two areas of increased recycled output in 2016 include calcium carbonate backing material and carpet tile. Calcium carbonate increased from just 0.2% of recycled output in 2015 to 6.4% in 2016. Recycled tile made up 3% of 2016 total recycled output, up from 2.5% in 2015, and tile and broadloom reuse combined made up 2.3% of recycled output in 2016 (compared to 0% in 2016):

- As mentioned in Section 5.7, the calcium carbonate subsidy was increased to \$.17/lb for Tier-1 processors in Q3 2015. Combined with grant awards and technical assistance, this subsidy helped support a 38-fold increase in the number of calcium carbonate pounds recycled to 2.4 million. It also helped to open up this historically unrecyclable carpet backing material to new potential secondary markets, representing 6.4% of total recycled output pounds in 2016 (See Section 5.7 – Figure L).
- In addition, the Carpet Tile Recycle Subsidy adopted in Q2 2015 recognized that carpet tiles offer a generally higher percentage of recyclability than other carpet products. (See Table 2 in Section 3 for a summary of subsidy and incentive payouts.) Carpet tile recycled in 2016 increased 31% to 1.12 million lbs from 856,000 lbs recycled in 2015 (See Figure N). In 2016, carpet tile represented 3% of total recycled output pounds, a growing portion.

Figure N: Carpet Tile Recycled Pounds in 2016



Results of gross collections and recycled output over time are further summarized in Section 5.5 and Section 5.6. Subsidies and initiatives for Tier-2 manufacturers are detailed in Section 6.

5.9 Increasing Overall Diversion – Section 18944(5)(A)8

Describe efforts to increase diversion of PCC from landfills.

Overall diversion of PCC from landfills is a principal objective of the Program, especially as technology, infrastructure, and awareness of carpet recycling continue to evolve. Net diversion is defined as the difference between gross collections net of any materials sent to landfill.

Materials diverted from landfill include Reuse, Recycled Output (Type 1 + Type 2 + calcium carbonate + Carcass), CAAF and Kiln, WTE, and exported whole carpet. Carpet cushion is excluded from carpet diversion figures but does constitute additional landfill diversion as an auxiliary benefit of the Program (see Table 1 for pounds of pad diverted). In 2016, net diversion was calculated to be 86 million lbs, or 25% of discards and 80% of gross

collections. This is a 6% increase from the 81 million lbs of net diversion in 2015, which was 23% of discards and 78% of gross collections.

Reported diversion, which is slightly different than net diversion, is calculated by the sum of reuse, Recycled Output (Type 1 + Type 2 + calcium carbonate + Carcass), CAAF and Kiln, WTE and exported whole carpet. Cushion is excluded. In 2016, the total reported diversion (not including cushion) equaled 61 million lbs, a 16% decrease from 73 million lbs in 2015.

Net diversion typically does not equal reported diversion for two reasons. First, gross collections are based on estimates, not actual shipments or sales, while recycled output is based on actual weights. Second, a substantial amount of material may be retained in inventory as whole carpet, processed materials, or other outputs in progress that are not yet accounted for as finished material outputs.

Reported diversion by type and percentage are shown in Table 10, Table 11, and Figure O.

In 2016, the largest component of reported diversion was fiber/depolymerization, at about 34 million pounds. The second largest component of reported diversion is energy recovery at about 21 million diverted pounds, the majority of which was sent to WTE, while the remaining energy recovery is derived primarily from Kiln. Remaining diversion includes calcium carbonate at about 2.4 million pounds, exports at about 2.3 million pounds, reuse at about 92,600 lbs, recycled tile at 1.1 million lbs, and 169,000 lbs of carcass.

Carpet cushion/pad is additive diversion (a co-benefit of carpet recycling diversion/efforts); In 2016, about 6.8 million lbs were reported diverted from the landfill. The California Program indirectly diverts carpet padding or cushion (predominately polyurethane foam, also known as rebond) at several sites where the padding material is accepted with PCC as a separate recycled material. A strong market exists for these materials; being able to recycle both co-generated materials at the same time improves program participation.

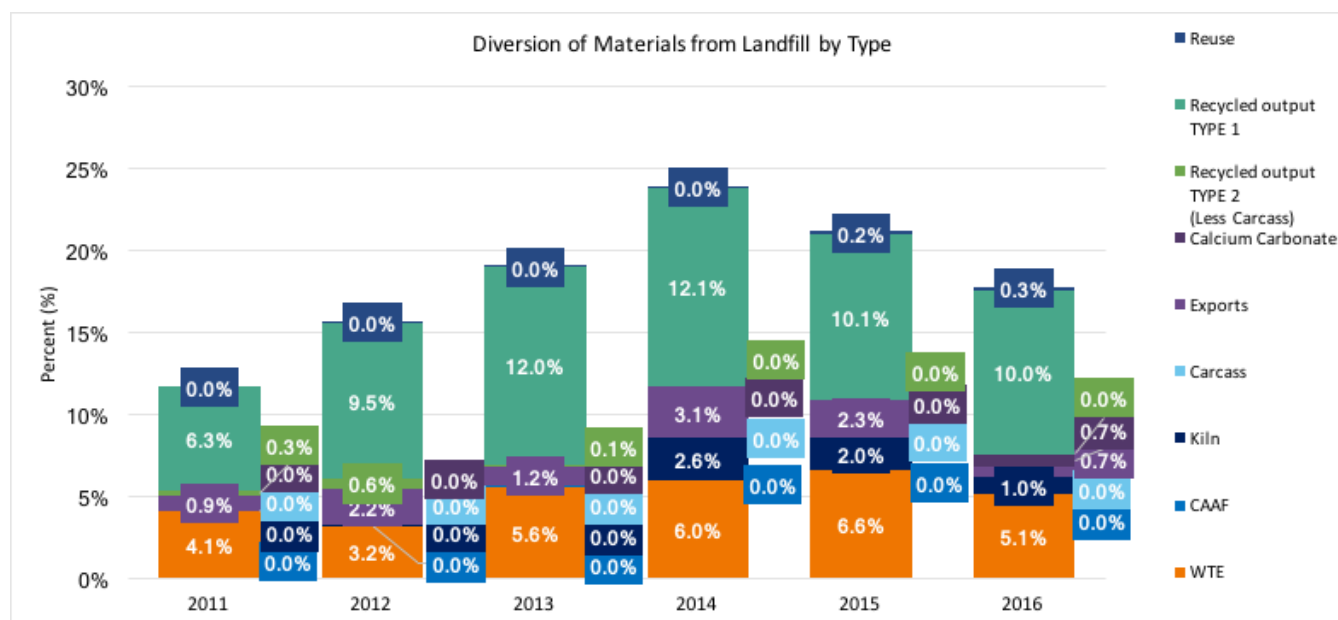
Table 10: Reported Diversion by Type (thousands of pounds)

Diversion from Landfill by Type	2011 (only includes Q3 and Q4)	2012	2013	2014	2015	2016
Reuse	-	152	26	174	614	926
Tile Recycled	44	336	310	717	856	1,122
Fiber / DePoly	11,486	34,007	43,719	43,397	34,762	34,219
Calcium Carbonate	-	-	-	-	61	2,412
Filler	522	1,983	390	-	-	-
Carcass	-	160	-	-	-	169
Kiln	-	44	48	9,255	6,854	3,417
CAAF	-	-	137	-	-	54
WTE	7,444	11,417	20,331	21,311	22,880	17,548
Exports	1,712	7,953	4,330	11,228	7,846	2,272
Carpet Cushion/Pad	692	6,108	2,914	4,804	6,901	6,765

Table 11: Reported Diversion by Percentage

Diversion from Landfill by Type	2011	2012	2013	2014	2015	2016
Total Carpet Discards (thousands of pounds)	181,036	356,977	363,567	357,671	345,197	342,787
Reuse	0.0%	0.0%	0.0%	0.0%	0.2%	0.3%
Tile Recycled	0.0%	0.1%	0.1%	0.2%	0.2%	0.3%
Fiber / DePoly	6.3%	9.5%	12.0%	12.1%	10.1%	10.0%
Calcium Carbonate	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%
Filler	0.3%	0.6%	0.1%	0.0%	0.0%	0.0%
Carcass	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Kiln	0.0%	0.0%	0.0%	2.6%	2.0%	1.0%
CAAF	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
WTE	4.1%	3.2%	5.6%	6.0%	6.6%	5.1%
Exports	0.9%	2.2%	1.2%	3.1%	2.3%	0.7%

Figure O. Tier-1 Processor Reported Diversion of Materials from Landfill by Type



5.10 Environmental Impacts – Section(5)(A)9

Describe other environmental impacts as data are available, e.g., greenhouse gas emissions. Descriptions of any enforcement actions or problems related to plan implementation.

The Environmental Protection Agency (EPA) has identified recycled carpet as a material with significant potential greenhouse gas (GHG) reduction potential. Establishing and supporting a robust PCC recycling industry may have significant implications for GHG reductions statewide. GHG reductions related to California Program activities in 2016 were calculated utilizing the EPA Waste Reduction Model (WARM).

Due to the reduction in domestic depolymerization of nylon 6, less energy intensive mechanical practices are replacing the use of chemical conversion practices, resulting in a net reduction of greenhouse gas emissions for every pound of carpet recycled compared to previous years. CARE is working with Dr. Matthew Realf of Georgia Tech, a leading expert in such calculations, to better understand these changes and emissions impacts. Comments were submitted to California Air Resources Board (CARB) in 2016 for consideration. At present, CARB has not adjusted carpet emission factors, nor responded to this submission. Because of this, the numbers in this report using the existing WARM model are anticipated to be underestimated.

Results indicate a total of 187,812 metric tons carbon dioxide equivalent (MTCO₂E) were reduced since Program inception, or an average annual reduction of 35,473 MTCO₂E⁶. In 2016, Program and partner activities resulted in the reduction of 34,673 metric tons of MTCO₂E (See Figure P), an increased reduction of 9,747 MTCO₂E over baseline year. Figure Q, Table 12, and Figure R represent the WARM Analysis, Summary, and Equivalency Results for 2016 GHG emissions reductions.

⁶ Total to emissions reductions to date based on the cumulative sum of reductions from July 1, 2011-December 31, 2016, using estimates generated by the EPA WARM model. Average annual emissions reductions are based on annual reductions from 2012-2016. Baseline year (June 1, 2011-June 30, 2012) emissions reductions totaled 24,926 MTCO₂E.

Figure P. GHG Emissions Reductions over History of Program

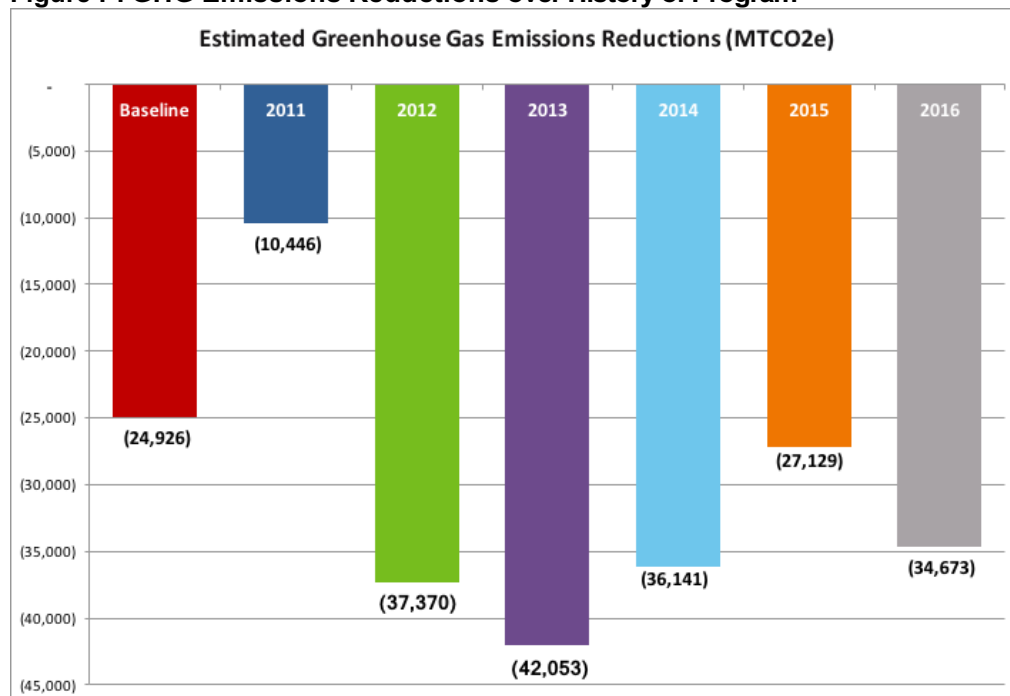


Figure Q. WARM Analysis of GHG Emissions Reductions for 2016

GHG Emissions Analysis — Summary Report	
(Version 13, 3/15)	
Analysis of GHG Emissions from Waste Management for CARE	
Prepared by CA Carpet Stewardship Program	
Reporting Period for this Analysis is from 01/01/2016 to 12/31/2016	
GHG Emissions from Baseline Waste Management Scenario (MTCO2E):	6,646
GHG Emissions from Alternative Waste Management Scenario (MTCO2E):	-28,026
Total Change in GHG Emissions: (MTCO2E):	-34,673

Table 12. WARM Summary of 2016 Reductions in GHG Emissions by Program Activity

Material	Baseline Scenario					Alternative Scenario						Change (Alt - Base) MTCO2E
	Tons Recycled	Tons Landfilled	Tons Combusted	Tons Composted	Total MTCO2E	Tons Source Reduced	Tons Recycled	Tons Landfilled	Tons Combusted	Tons Composted	Total MTCO2E	
Carpet	0	171,393	0	N/A	6,646	463	18,364	142,057	10,509	N/A	-28,026	-34,673

Note: A negative value indicates an emission reduction; a positive value indicates an emission increase.

a) For an explanation of the methodology used to develop emission factors, see Documentation for Greenhouse Gas Emission and Energy Factors Used in the Waste Reduction Model (WARM) — available on the Internet at <http://epa.gov/epawaste/conservation/tools/warm/SWMGHGreport.html>

b) Emissions estimates provided by this model are intended to support voluntary GHG measurement and reporting initiatives.

c) Total emissions estimates provided by this model may not sum due to independent rounding.

Figure R. WARM Analysis of GHG Emissions Reductions for 2016: Equivalency Results

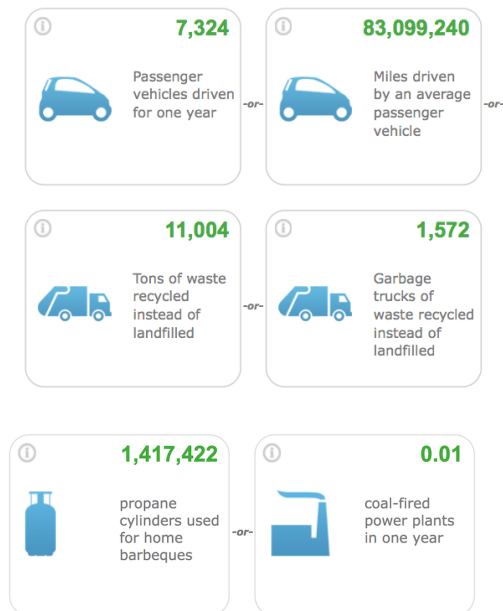
Equivalency Results

[How are they calculated?](#)

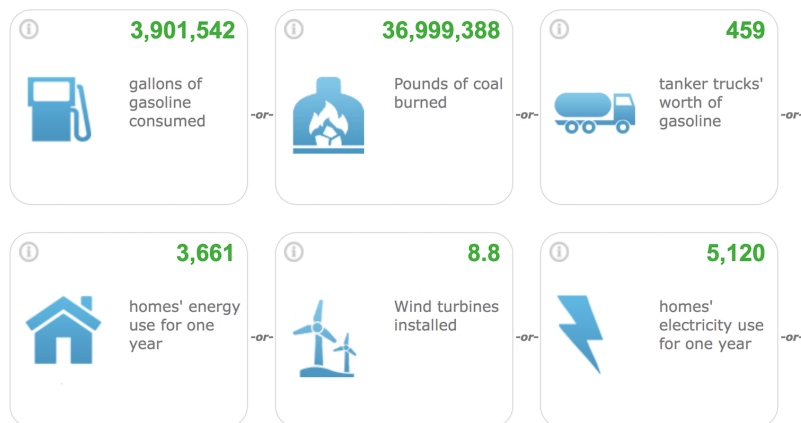
The sum of the greenhouse gas emissions you entered above is of Carbon Dioxide Equivalent. This is equivalent to:

34,673 Metric Tons

Greenhouse gas emissions from



CO₂ emissions from



Carbon sequestered by



5.11 Increasing Market Growth of Secondary Products – Section 18944(5)(A)10

Describe efforts to increase the market growth of secondary products made from PCC.

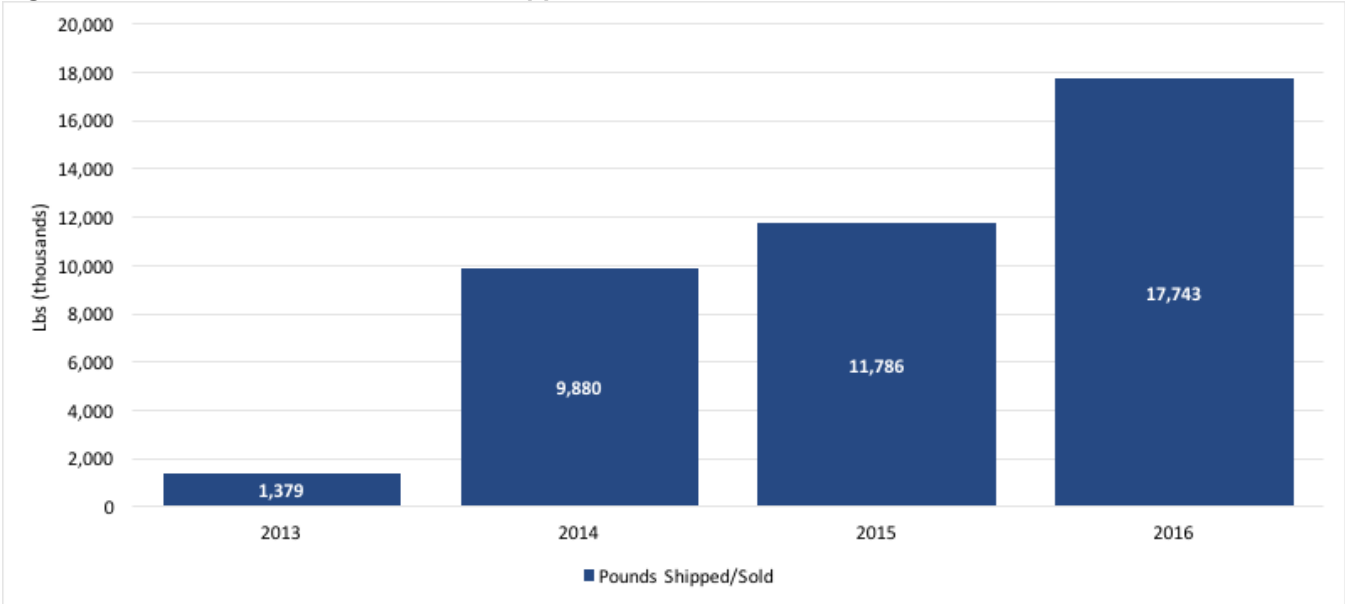
In 2016, the California Program was focused on four primary areas to promote the use of recycled output in new carpets or new secondary products useful to the marketplace:

- Development of recycled carpet products produced in California
- Exploration of alternative uses for existing products, e.g. recycled carpet content cushion
- Increasing number of Tier-2 manufacturers producing recycled carpet products in California
- Engagement of public entities to spur interest in purchasing recycled carpet products.

The year was highlighted by changes to the Program that focused on stimulating the secondary market, including the calcium carbonate subsidy for Tier-1 processors, development of the Double Green™ concept, and implementation of the grant program (See Section 6).

The year also saw a significant increase in Tier-2 manufacturer pounds shipped and sold, from 11.8 million lbs in 2015 to 17.7 in 2016, an increase of about 50% (see Figure S).

Figure S. Tier-2 Manufacturer Pounds Shipped and Sold Over Time

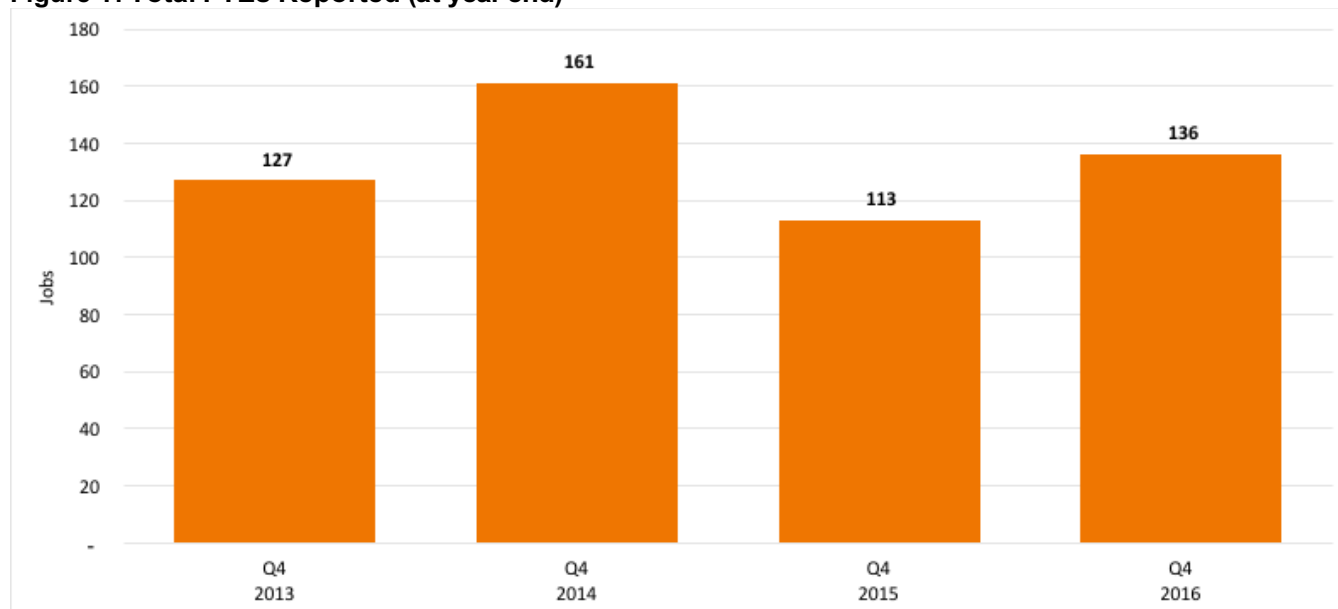


5.12 Creating Green Jobs – Section 18944(5)(A)11

Describe number of jobs attributable to the carpet stewardship program as data are available.

At the close of 2016, a total of 136 full time equivalent (FTE) jobs could be attributed to CSE, Tier-1 processor, and Tier-2 manufacturer employers, as well as CARE staff and contractors. This is a 14% increase from 119 total FTEs reported in 2015 (113 FTEs not including CARE staff and contractors) (See Figure T). An estimated 14 new FTE jobs (82% of reported job gains) resulted from increased throughput attributable to Cycle 1A/1B grant investments.

Figure T. Total FTEs Reported (at year end)*



***Beginning in 2016, annual figures also include CARE staff and contractor FTEs.**

Job numbers are reported only for direct jobs within California, and are submitted for quarters or months when a company submits a subsidy request. Figure T does not include jobs at facilities located outside California, such as Tier-1 processor and Tier-2 manufacturers located in other states. The California Program also estimates that three to five indirect jobs are created for every one job resulting from the PCC recycling industry in California. Under this assumption, the industry has created more than 400 direct and indirect jobs in California over time. This number will increase as recycled output demand increases and new Tier-1 processors and Tier-2 manufacturers open new facilities within California.

5.13 Measurement Methodology, Assumptions, Factors and Data Sources – Section 18944(5)(B)1

Describes the measurement methodology, assumptions, conversion factors, and data sources.

Measurement methodology is outlined in detail within the California Carpet Stewardship Plan 2017-2021 (2017-2021 Plan). The Program recycling rate is estimated as a function of total estimated discards, which was 11% in 2016. The formula used for calculating carpet available for diversion is also summarized below (See Section 5.13.1.)

The values used in the formula are updated annually in April based on market data gathered by Market Insights, Inc., an independent market research firm, in February 2017.⁷ This update does not affect previously reported 2016 quarterly data.

⁷ US Carpet Market Size for Recycling Program Tracking with California Market Detailed,” (Market Insights, Inc., February 24, 2017).

5.13.1 Formula for Calculating Carpet Discards

The discard methodology variables are presented in Tables 13a and 13b. As is seen in Table 18b, the formula was updated starting in Q3 2016 to include DS (deselection), or pounds of carpet removed but not replaced by carpet.

Table 13a. Discard Methodology Variables (Q1 – Q2 2016)

Variable	Variable Description	Updated Value	Source
S	Sales (sq yd)	47,079,394	Accounting firm (Aprio, LLP)
R	Replacement Rate (%)	0.84	Market Insights, Inc.
P	Average weight of carpet per square yard (lbs)	4.2	CARE
D	Pounds of carpet from demolition projects not replaced (%)	0.0051	Market Insights, Inc.

Table 13b. Discard Methodology Variables (Q3 – Q4 2016)

Variable	Variable Description	Updated Value	Source
S	Sales (sq yd)	47,049,954	Accounting firm (Aprio, LLP)
R	Replacement Rate (%)	0.84	Market Insights, Inc.
P	Average weight of carpet per square yard (lbs)	4.39	CARE
D	Pounds of carpet from demolition projects not replaced (%)	0.006	Market Insights, Inc.
DS	Pounds of carpet removed but not replaced by carpet (%)	0.0075	Market Insights, Inc.

See Table 14 for the formulas used for Q1 2016 – Q2 2016 discards, and Q3 2016 – Q4 2016 discards:

Table 14. 2016 Discards Formulas

Q1 2016 -Q2 2016	Q3 2016 - Q4 2016	ANNUAL TOTAL
$= S * R * P * (1 + D)$	$= S * R * P * (1 + D + DS)$	
$= 47,079,394 * 0.84 * 4.2 * (1 + 0.0051)$	$= 47,049,954.11 * 0.84 * 4.39 * (1 + 0.0060 + 0.0075)$	
166,943,192 lbs	175,843,680 lbs	342,786,872 lbs
166.943 million lbs	175.844 million lbs	342.787 million lbs

S = Carpet sales (sq yd) in California for the reporting period. Sales data comes from the independent accounting firm Aprio who collects the confidential sales data from the carpet manufacturers registered with CARE.

R = Percentage of carpet that is replacement, or carpet replacing existing carpet. This rate is derived as the weighted average of the residential vs. commercial sectors and reported by Market Insights, etc.

P = Average weight of carpet per square yard. CARE gathers and analyzes raw industry data to calculate the weighted averages of carpet weights of broadloom and tile used in the commercial and residential sectors.

D = Pounds of carpet from demolition projects that were not replaced. This includes the weighted demolition rate (75% residential broadloom, 15% commercial broadloom, and 10% commercial carpet tile). D is converted to pounds by multiplying the percentage by the product of S x R x P. This data is gathered by Market Insights, Inc.

DS = Pounds of carpet removed (deselection) but not replaced by carpet. The estimate is based on reviewing historical trend data is 0.75% (DS = Sales in pounds x rate)

The current formulas also take into account the following:

- Demolition represents the teardown of a building. The actual volume of carpet resulting from this process cannot be accurately calculated. By using the actual demolition rate obtained from Market Insights, Inc. the total volume of carpet sent to landfill is being overestimated. However, this is a small fraction (~1%) of the overall amount and does not significantly alter the calculations because it is well within acceptable error limits.
- Deselection, or the removal of carpet for the replacement by another flooring material, is estimated to be approximately 0.75%, based on analysis of historical trend data. It has a minimal impact on the flow to landfill and is well within the error limits of current estimates.
- Trimmings discarded during the installation process are accounted for within total carpet sales figures, as reporting quarterly by participating carpet mills.
- Imported carpet discards are excluded from data in this report, as Tier-1 processors only report California carpet materials collected, recycled, and disposed. Reported California carpet shipments by carpet mills are verified through regularly Agreed Upon Procedures (AUP) reviews by Aprio.
- In December 2016, CalRecycle raised concerns regarding the discards formula during their review of the 2017-2021 Plan. CARE acknowledged that this formula and approach to discards, which has been in use for the last three years, results in a very different estimate than the number calculated in CalRecycle's statewide characterization study. In response, CARE has committed to facilitating meetings between CalRecycle, CARE and CalRecycle's contractor, Cascadia Consulting Group, (to include a statistician,) to review relevant information and come to reasonable conclusions regarding CARE's accuracy in calculating discards by the end of 2017.
- At this time, no additional data gaps have been identified.

5.14 Performance Trends Over Time – Section 18944(5)(B)2

Report demonstrates that over time source reduction, reuse, and recycling increased, while environmentally safe transformation and land disposal decreased.

Figure U summarizes performance trends over time with four key indicators:

- Gross collections
- All material sent back to landfill by CSEs and Tier-1 processors (includes both sort and processing waste)
- Recycled output (portion of gross collections that qualifies as reuse, Recycled Output Type 1, Recycled Output Type 2, calcium carbonate, or carcass)
- Net diversion (balance of gross collections minus materials sent to landfill)

Figure U. Collection, Recycled Output, Net Diversion, and Process Waste to Landfill Performance Trends

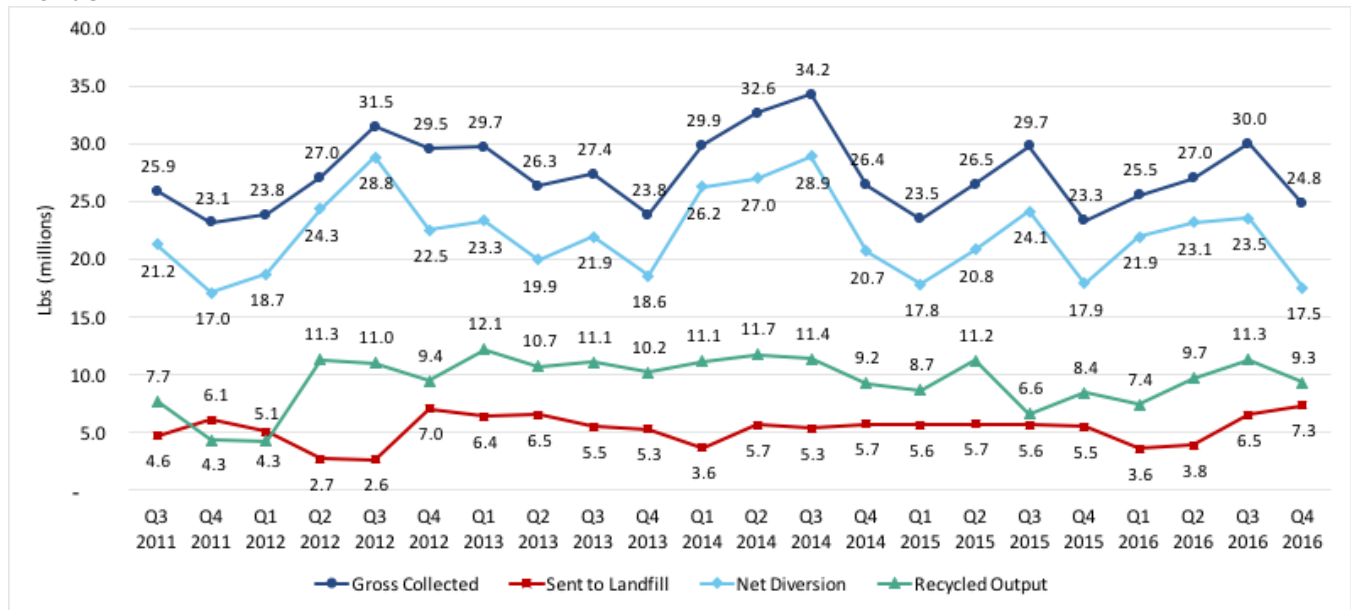


Figure U also illustrates the history of the California Program during the past 22 quarters. Initial success in 2011 and 2012 was followed by relatively flat growth in 2013 and 2014. Although collections remained flat, the market was able to sustain itself despite the loss of two California-based Tier-1 processors in late 2013. This plateau sparked the first program assessment increase to fund the launch of several subsidies to stimulate interest by Tier-1 processors and Tier-2 manufacturers. External macroeconomic and industry factors then triggered a sharp decline in gross collections, diversion, and recycling output during 2015.

In 2016, there were improvements in Q1 through Q3 in gross collections, net diversion, and recycled output. The changes from Addendum 3 in 2015 and 2016 likely helped to spur this upward trend. A normal drop was seen in Q4 2016, but still an improvement over Q4 2015 numbers.

Note that these figures fluctuate seasonally, with lower levels of materials being generated during winter (Q1 and Q4) compared to summer (Q2 and Q3). The numbers also track new carpet sales.

Changes over time compared to baseline year (July 2011 – June 2012) include:

- Increased **reuse** from 98,000 lbs baseline to 926,000 pounds in 2016.
- Generally flat **gross collections**, fluctuating from 28% baseline to a high of 34% in 2014, dropping to 31% in 2016
- Increased **recycled output** from 8% baseline to a high of 12% in 2013 and 2014, dropping to 11% in 2016.
- Recent decline in **carpet sales** from 98 million sq yds baseline to a high of 101 million in 2013, falling to 94 million in 2016.
- Increased **net diversion** to 86 million lbs (25% discards) in 2016, from 78 million lbs (22% discards) baseline.
- Recent decline in use of **energy recovery** as diversion, decreasing 8.7 million lbs from 2015 and nearly 10 million lbs over a high of 30.5 million in 2014. Energy recovery remains 5.3 million lbs higher than baseline.
- **Jobs** have fluctuated substantially over time as new players come into and out of the carpet recycling marketplace, (and the Program has improved data on jobs,) gaining 17 FTE jobs in 2016 over 2015.
- New **recycled carpet content products** totaled 25 products from 9 vendors in 2016, up 39% from roughly 18 products in the previous year, the first year this data was collected.

- New **public carpet recycling drop-off sites** were added over time, totaling 33 sites in 2016, compared to 0 at baseline, expanding convenient collection opportunities throughout the state.
- Implemented **numerous new education and outreach efforts** since 2011, including: identifying the entire California retailer audience and reaching 72% via in-person and phone visits in 2016; holding multi-stakeholder facilitated events in southern and northern California; publishing a monthly enewsletter and regular blogs to inform the public about Program activities.

5.15 Continuous Meaningful Improvement – Section 18944(5)(B)3

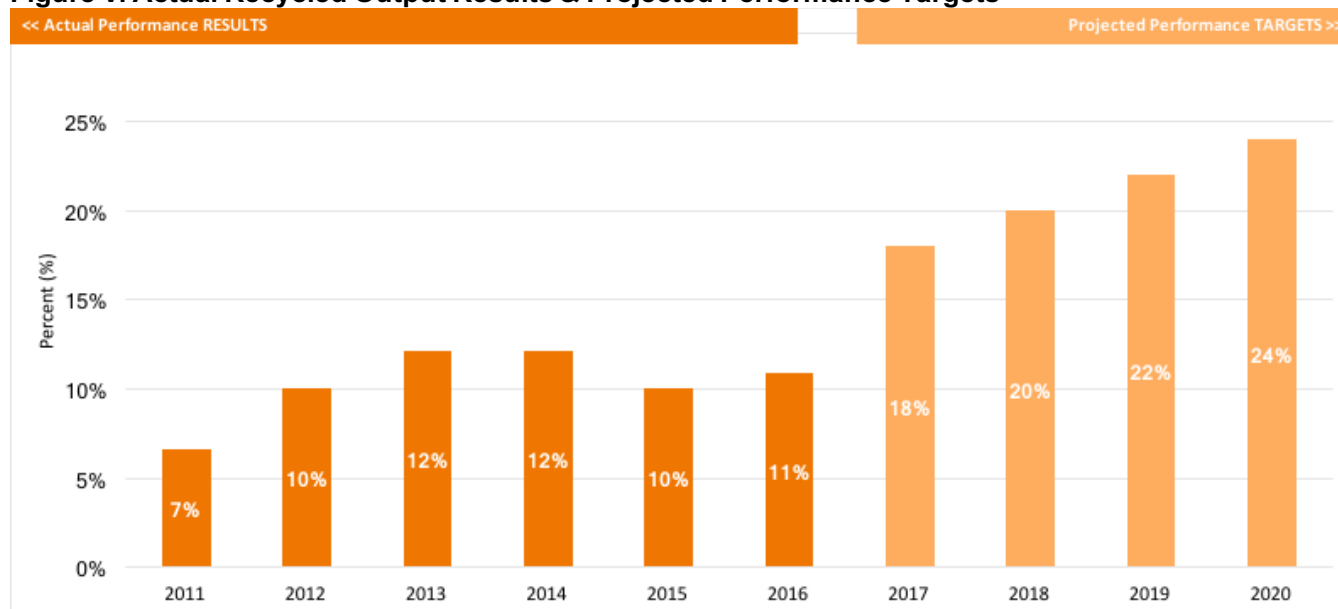
Report demonstrates continuous meaningful improvement toward achievement of goals.

The California Program has shown continuous meaningful improvement throughout 2016, especially in actions taken in the areas of recyclability, reuse, convenient collection, outreach and education, and market development. Addendum 3, submitted to CalRecycle in November 2015, was approved in January 2016. These changes were made to improve the Program's responsiveness to fluctuating marketing conditions as well as to further enhance financial reporting and transparency. Even more importantly, the efforts in 2016 have laid a strong foundation for capacity expansion and thus, the significant improvements seen in Q1 of 2017.

These actions included: new and modified CSE, Tier-1 processors, and Tier-2 manufacturer subsidies; an expanded budget for education and outreach and collection site support; reduction of the reserve amount to the average of one quarter to make more funding available for critical activities; and the development of an economic model to better understand current and future forces and quickly respond to changing market conditions. In 2016, the Program also awarded \$2 million in grants to support capital investments and product testing, which will serve to increase the collection, recyclability, and utilization of California-generated PCC. To achieve and fund these initiatives, the assessment was doubled from \$0.10/sq yd to \$0.20/sq yd, effective Q2 2016. This represents a 400% increase since the program began.

Since the first full year of operation for the California Program, recycled output has been relatively constant, as illustrated in Figure V which shows recycled output results through the reporting year 2016. The right side of Figure V projects the rate for the future. In 2015, the Program projected a 16% recycling rate in 2016 based on past performance. The Program attained a rate of 11% in 2016, a slight increase from 2015 but 5% below projected performance. As noted previously, major investments made in late 2015 and in 2016 resulted in new capacity coming on line, a bit later than projected, but driving a significant increase in recycled output of 16% as recorded for Q1 of 2017.

Figure V. Actual Recycled Output Results & Projected Performance Targets*



*Recycled output includes Reuse + Type 1 + Type 2, but does not include additional diversion achieved through mechanisms such as CAAF, Kiln, WTE, exports, etc.

In order for the Program to accomplish its 2020 recycled output goal of 24%, it will need to 1) increase recycled output by 1.75% during each quarter in 2017, and 2) achieve a 2% increase per year thereafter.

Summary of Feedback

CalRecycle's Request for Approval (RFA) from September 20, 2016 made several recommendations on how the California Program could achieve continuous meaningful improvement. Highlights pertinent to the current reporting period are presented below.

❶ Finding 1 – The recycled output and other program goals are not showing meaningful and continuous improvement.

Please see Section 5.8 and Section 5.1 - Table 8. Progress in 2016 was significant and meaningful, laying a solid foundation for growth in 2017.

❷ Finding 2: Consumers purchasing carpet do not have reasonable access to recycling services in all counties.

The Rural County Collection Program became a full program in 2015, expanding to include urban sites in Sacramento and El Dorado. By December 2016, there were 33 Program-supported drop-off sites serviced by 33 counties, up from 23 sites in 22 counties in 2015. In addition, CARE is making efforts to quantify private services offering additional collection opportunities throughout the state. Combined, public and private sites total an estimated 233 sites throughout California as of December 2016. Initial analysis indicates that as of May 2017, approximately 92% of the state's population lives within a county with access to one or more private or public carpet recycling sites. Program is also planning to conduct a study to evaluate reasonably convenient collection opportunities in the state which will take into account factors such as population, geographical distribution, and the role of private service at retailers and distribution centers. The study is scheduled to begin in late 2017 (See Section 4.2).

● Finding 3: Education and outreach efforts have not resulted in increased carpet recycling or diversion. Key target audiences such as installers, retailers, and consumers remain unaware of CARE's Carpet Stewardship Program, what recycling services are available, what assessment funds are used for, and what their respective roles are in making the Program successful.

The following actions were taken during 2016 to address this finding:

- The amount expended on outreach and education increased to \$709,575 in 2016, from \$226,900 spent in 2015, enabling the launch of several communication initiatives targeting consumers through retailers, local governments, and installer/contractors by environmental marketing agency Gigantic Idea Studio. These initiatives are detailed in Section 8. Some highlights include:
 - 1162, or 72%, of 1,606 verified California carpet retailers were visited in-person or by phone in 2016.
 - Local government outreach was expanded through recycling coordinator and zone administrator communications, procurement collateral, and recycled product promotion.
 - Installer/contractor outreach was expanded through drop-off site engagement, distribution of flyers, and creation of an installer-focused educational video. Plans and educational materials were developed to begin installer training in early 2017.
 - Stakeholder workshops were offered to the public in northern and southern California; additional stakeholder outreach was conducted via webinars and in-person presentations.
 - Presentations were made to a variety of industry groups and government agencies to promote awareness of the program and the availability of secondary recycled products.

● Finding 4: CARE is not responding to market changes in a timely manner with assessment and incentive adjustments, and the assessment may not be set high enough to fund infrastructure development and drive markets for increased recycling output.

Significant changes were adopted in 2016 to improve responsiveness and implement incentive adjustments including:

- The calcium carbonate subsidy for Tier-1 processors.
- The development of new economic model and financial modeling tools to increase Program understanding of economic trends and cash flow.
- The development of the Double Green™ label, allocating approximately \$2M in Cycle 1A/1B grant funding to expand recycling capacity and product testing to build opportunities for recycled carpet products.
- The launching of the Cycle 1C procurement grant program, which reimburses public entities for buying products containing California-generated PCC.

Please see Section 3, Section 6, and Section 5.14 for more information on these changes.

6 Market Development – Section 18944(a)(6)

Statutory Citation

The annual report shall include a description of possible market development activities to incentivize the market growth of secondary products made from PCC.

6.1 Introduction

Tinney & Associates (Tinney) contracted with the CARE California Stewardship Program (Program) to focus on market development starting in 2014. 2016 activities centered on a continuation of the work done in 2014 and 2015, developing products and markets for California-generated post-consumer carpet (PCC) material in the following ways:

- Development of new recycled carpet products produced in California
- Exploration of alternative uses for existing carpet products
- Increasing the number of Tier-2 manufacturers producing recycled carpet products in California
- Engagement of public entities to spur interest in purchasing recycled carpet products, including the development of the Double Green™ label

In 2016, Tier-2 manufacturer incentives continued to spur product development of a wider variety of products using recycled carpet output. Both subsidies and grants drove an increase in the number of Tier-1 processors processing carpet and Tier-2 manufacturers interested in producing secondary products in California throughout the year. By the end of 2016, two new companies signed contracts to join the Program as Tier-2 manufacturers. A third company opened a second facility in California, bringing the number of Tier-2 manufacturers to 10. In addition, one new Tier-1 processor established operations in California, while another is expected to become established in 2017. Several Tier-1 processors established new relationships with secondary users of calcium carbonate recycled output.

6.2 Stimulating the Market

In 2016, product development work based on the concept of feedstock conversion continued. This involves adding PCC materials into the recipes of existing secondary products, displacing rubber or plastic in various percentages, to reduce the product cost, improve the aroma, or increase performance. As carpet backing material accounts for about 40% of carpet weight, Tinney focused on finding uses for backing made up of calcium carbonate and a variety of other materials (referred to broadly as “calcium carbonate”).

Several California Program initiatives made this concept viable in 2016, including:

- Subsidy of \$0.17/lb for Tier-1 processors producing non-fiber recycled output containing calcium carbonate.
- The development of the Double Green™ label, which designates products that contain California PCC plus at least one other post-consumer recycled material.
- Cycle 1A and 1B grants that funded processing equipment and product testing (see Section 6.2.1).
- Cycle 1C procurement grants, which reimbursed public entities for buying products containing CA-generated PCC, including Double Green™ products (see Section 6.2.1).

- Collaborative product presentations conducted with CalRecycle Tire-Derived Products staff, featuring products containing both recycled PCC and recycled tire material.

The calcium carbonate subsidy program took hold over the course of 2016, as potential product producers tested mixing calcium carbonate into their manufacturing processes and then testing the resulting products for performance, with the help of Program grant funding. This process exposed the need for calcium carbonate Tier-1 processors to provide a cleaner, less contaminated supply of calcium carbonate to meet the requirements of product producers, primarily molders of rubber products. Three California Tier-1 processors made modifications to their screening equipment in 2016 to address this.

At the suggestion of the California Carpet Stewardship Council (CPSC), Tinney contacted Visions Paint Recycling, which is developing a line of products combining recycled dried paint and recycled concrete. The company has also successfully added PCC derived calcium carbonate into their mix. Initial product performance tests are positive and production runs begin in March 2017. This opens up the potential for other paint recyclers in California to try something similar. This effort also demonstrates the value of inter-industry collaboration.

The Double Green™ label, rolled out in Q4 2016, has generated calcium carbonate consumption in California of 2.4 million lbs. Based on trends to date, these efforts could give rise to an annualized recycled output increase of 10 million lbs in the near-term for a market that did not exist 18 months ago. Double Green™ designates products that contains California PCC plus at



least one other post-consumer recycled material. In July 2016, the first Double Green™ floor mats were produced at Sierra Rubber Company in Modesto, California. Over the following five months, more successful product testing was done, adding ADA compliant threshold ramps, wheel stops, and a variety of floor mats. These products are being produced by Sierra Mat and Millennium Molding for SafePath Products. More development work on generating finer, even less contaminated calcium carbonate will be required to expand calcium carbonate usage into more sophisticated products. Both Sierra Rubber Company and SafePath Products were Cycle 1 grant recipients.

In 2016, the Program worked with CalRecycle to include Double Green™ products produced in California in their three [Buy Recycled](#) program product source databases: [The Recycle Store](#), the [Recycled-Content Product Manufacturers](#) (RCPM) directory, and the [Zone Information Reporting System](#) (ZIRS). These databases are used by residents and CalRecycle staff and zone administrators that want to purchase recycled content products in California. The California Program was also asked by CalRecycle to contribute to the newly developed Recycled Construction Products catalog. The catalog will contain all construction products available containing recycled material from California, including PCC material.

A flyer and [webpage](#) on the CARE website were also developed to promote and provide information on various products made with recycled PCC from nine vendors. Listings are based on vendor-provided product information and may not be inclusive of all available products which utilize California recycled carpet content. In 2016, these materials included 25 products including carpet tile, cushion and underlayment, packaging, as well as other products using recycled carpet content.

6.2.1 Grant Program

The grant program, launched in Q4 2015 under Addendum 2, has proven to be an additional boon to translate market opportunity into reality. The program prioritizes California-based companies, with a goal of awarding at least 50% of funds to California-based projects. In 2016, approximately 85% of awarded funds were for California-based projects. Cycle 1A/1B grants awarded in March 2016 were open to participating Program members, businesses qualified to do business in California, non-profit agencies, and local agencies. Cycle 1C grants released in summer 2016 were open to California public agencies and their contractors.

These grants support capital improvements that increase the:

- Number and capacity of Tier-1 processors and Tier-2 manufacturers.
- Number and variety of recycled carpet content products available in the marketplace.
- Quantity of recycled output utilized in secondary products.
- Testing and development support for reformulated products using recycled carpet content to explore new uses for PCC and ensure these products perform as required.

The three grant types include:

- **Capital improvement grants:** Cycle 1A allocated approximately \$2 million in funds, with up to \$500,000 maximum per grant, as of December 2016. This includes capital improvement, infrastructure, equipment, construction, renovation or expansion of collection, and processing or manufacturing facilities that manage or use California-generated PCC. It can also be used for partnerships with the aim of increasing the use of recycled output. The goal is to “increase the quantity (pounds) of California generated PCC that is collected, recycled, and utilized in manufacturing of Tier-2 recycled products” during 2016.
- **Product testing grants:** Cycle 1B offered up to \$250,000 in funding for projects focused on product testing, research and development, and similar activities that will enhance PCC collection, recycling, and utilization in manufacturing. This applies to feedstock conversion projects, new or reformulated products, or feasibility studies for new uses of PCC materials. The goal is to provide “assistance to eligible applicants to research, develop, and test new products or reformulate existing products produced using PCC material generated in California.”
- **Recycled Carpet Content Product Procurement pilot grants:** Cycle 1C offered up to \$500,000 for California public agencies and their contractors seeking to purchase approved products made with PCC, with a limit of \$50,000 per project. The goal of this cycle is to promote long-term, sustainable, and diversified markets for products produced from PCC. The application deadline for this cycle was December 30, 2016. CARE is currently finalizing contracts with Cycle 1C awardees, which will begin project implementation in 2017.

In 2016, CARE approved pilot grant funding and entered into contracts with eight companies under nine projects that support Capital Improvement (Cycle 1A) and Product Testing (Cycle 1B). The two programs totaled approximately \$2.0 million in approved grant awards. In 2016, CARE also launched the Recycled Carpet Content Product Procurement pilot grant cycle (Cycle 1C), open to California public agencies and their contractors seeking to purchase a variety of approved products made with PCC.

Awarded capital improvement and product testing projects represent a significant expansion in California PCC capacity through enhanced or improved operations at one existing California facility, the support of one out-of-state pilot using California PCC with potential for in-state operations in future years, and the establishment of four new PCC operations (two Tier-1 processors and two Tier-2 manufacturers) in California. Millions of pounds of increased recycled output annually are expected in Tier-1 processor and Tier-2 manufacturer products made from nylon 6 and 6,6, polypropylene, calcium carbonate, and polyethylene terephthalate (PET). The development of dozens of new jobs is also projected, with 14 new FTE jobs reported in 2016.

In 2016, Capital Improvement (Cycle 1A) grant funding led to approximately 13.4 million lbs of new recycled output capacity in California, or an approximately 35% increase in overall 2016 recycled output. Although these

gains were largely offset by losses in other areas, this increase in production capacity is expected to support future recycled output increases.

6.2.1.1 Grant Program Timeline and Actions taken in 2016

- Eight Capital Improvements (Cycle 1A) and three Product Testing (Cycle 1B) projects were selected and recommended for funding by the CARE Technical Committee (TC) in February 2016 and approved by the Stewardship Planning Committee (SPC) and Sustainable Funding Oversight Committee (SFOC) in March 2016. The TC was comprised of seven members: the CARE Market Development Manager, CARE Grants Manager, CARE California Program Manager, two independent engineers familiar with recycling capital projects, and two independent members of California local governments. Each member reviewed and scored applications and awardees were chosen based on a combination of scores and outcomes from internal TC discussions based on grant criteria.
 - Approximately \$2.4 million was approved for funding.
 - 88% of funds approved were for California-based projects.
- Grant award and decline letters were sent to grant applicants in March 2016.
- Contract documents for Cycle 1A and 1B recipients were completed in February and executed by May 2016.
 - Contract documents executed before receiving *Notice to Proceed* included: Reliable Contractor Document (if needed), Business Certification Checklist, Recycling Targets document, Feedstock Certification (to be completed each quarter), Contract Cover Page, Procedures and Requirements, and Terms and Conditions.
- All grantees received *Notice to Proceed* between April and May 2016.
 - One grantee did not accept funding due to limited funding offered.
 - One grantee was declined funding because contract could not be completed.
 - Approximately \$2 million in funding was accepted, 85% of which is designated for California-based projects.
 - One product testing project received an additional \$41,000 from unallocated Capital Improvements funding in order to execute additional project elements.
 - Unspent approved grant funding may be reallocated to successful projects in 2017.
- Reporting and payment request documents were completed in May 2016 for quarterly reporting.
- Recycled Carpet Content Product Procurement Grants (Cycle 1C) draft solicitation was posted in June 2016.
- Cycle 1C public webinar was completed in June 2016.
- Cycle 1C questions and comments were received in June 2016.
- Cycle 1C Question and Answer document was posted for public in July 2016.
- Final Cycle 1C grant solicitation was released in July 2016. The preliminary application deadline was extended three months to December 30, 2016.
- Cycle 1C approved products sheet, application template, and budget were released for applicants in July 2016.
- Cycle 1C contract documents were completed in November 2016.

- Contract documents included Procedures and Requirements, Terms and Conditions, and Contract Cover Page.
- Cycle 1C applicants are to be approved in 2017. Projects should be launched in early 2017.

6.2.1.2. Cycle 1A and Cycle 1B 2016 Grantees and Projected Outcomes

- [American Fiber Cushion](#) (Dalton, Georgia) Awarded \$250,000 (Cycle 1A): American Fiber Cushion (AFC) has committed to working with California carpet recyclers to process and ship California PCC recycled output fibers to its existing Georgia facility to be remanufactured into new Tier-2 manufacturer recycled products for resale, primarily carpet pad. The company intends to use this project as a pilot operation for a future PCC processing facility in California. AFC expects 10 million additional lbs in recycled output in 2017, and 20 new California jobs in warehousing. This was the only project funded outside of California.
- [Carpet Solutions](#) (Carson, California) Awarded \$375,000 (Cycle 1A): Through the installation of cleaning and pelletizing machines, Carpet Solutions will improve the quality of post-consumer nylon 6 and nylon 6,6 carpet fiber processed at its existing California-based facility. The improved carpet fiber will fill a current market gap for the availability of clean, nylon fiber, suitable for pelletizing and use in Tier-2 manufacturer processes. Carpet Solutions expects to manufacture two new products in the furnishings market, create 20 new California jobs in 2017, and add 8.3 million lbs of recycled output in 2017.
- [Carpet Solutions](#) (Carson, California) Awarded \$24,000 (Cycle 1B): This testing project will conduct sample testing of a 100% post-consumer carpet nylon chair that is manufactured using California PCC nylon recycled output, to diversify secondary use opportunities for recycled nylon feedstock. Chairs will undergo testing to qualify the new recycled product for marketing and sale in the United States.
- CLEAR (Lake Villa, Illinois) Awarded \$350,000 (Cycle 1A): CLEAR has built a new facility in Lincoln, California to manufacture products containing post-consumer carpet. The project is recycling carpet fiber into pellets for existing products such as shelves, toolboxes, pallets, and other products and use calcium carbonate for concrete forms. CLEAR added 12 million lbs of recycled output and 10 new jobs in 2016 and projects to add 14 additional jobs and double recycled output in 2017. CLEAR's recycled output in 2016 exceeded its stated target by over 70%.
- [GHD](#) (Santa Rosa, California) Awarded \$145,984 (Cycle 1B) — The purpose of this testing project and feasibility study, in partnership with Humboldt State University Environmental Resource Engineering (ERE) Department, is to help determine the feasibility of using PET carpet fiber for civil engineering applications such as lightweight fill, infiltration media, and erosion control. This project includes testing of shredded waste carpet to define its beneficial properties as a construction material. Leachate quality in contact with calcium carbonate, shredded carpet, carpet face fiber, and backing has also been tested. The project was completed in 2016, with final report summarizes results to be provided by March 2017.
- [SafePath Products](#) (Chico, California) Awarded \$462,000 (Cycle 1A) – SafePath Products will develop a new secondary manufacturer facility in Northern California that will use fiber and calcium carbonate as an additive in several existing products along with other engineering applications still being tested. 2 million lbs of recycled output are expected in 2017, as well as the development 12 new jobs and six new products, including ramps and flooring substrate.
- [Sierra Rubber Company](#) (Ripon, California) Awarded \$108,000 (Cycle 1A) — The purpose of this project is to purchase equipment necessary to expand new and existing product lines using recycled carpet components—in particular, calcium carbonate blended with recycled rubber. Sierra Rubber Company has become a new California secondary manufacturer using recycled PCC. The company is manufacturing or testing four different products made with PCC, has added four new California jobs, and added 1.4 million lbs

of recycled output in 2016. Sierra's 2016 total recycled output was more than five times its stated target set at the beginning of its grant term. Sierra will continue to add jobs and increase recycled output by a projected 50% in 2017.

- [South Bend Modern Molding](#) (Mishawaka, Indiana) Awarded \$50,000 (Cycle 1B) — This testing project is evaluating various combinations of PCC components (primarily nylon, PET, and calcium carbonate) with recycled rubber and plastics for various properties necessary for finished products, as well as performing tests on a large application sound barrier that utilizes PCC.
- XT Green (Irvine, California) Awarded \$250,000 (Cycle 1A) — Grant funds help support the construction of a new, advanced technology carpet recycling facility in Southern California. Operating under the name of EarthCare Carpet Recycling, the facility's processing system was developed by XT Green to produce highest quality reclaimed nylon, polypropylene, and calcium carbonate for use in manufacturing in California while also claiming record recycling rates, greenhouse gas reduction benefits and worker health protection standards. XT Green expects to produce 17.8 million lbs of recycled output annually once operations begin in Q4 2017, and will add a projected 60 California jobs. The facility is also anticipated to accept hard-to-recycle commercial PCC, opening new markets for a significant portion of the carpet waste stream.

Note: Two Cycle 1A grantees, CLEAR and Sierra Rubber Company, exceeded their project goals in 2016. Both grantees received grants below their original proposal requests. Based on their success and upon review by the Technical Committee, these grantees were recommended to receive additional funding equal to their original grant requests (\$150K and \$111K, respectively.) This is based on available unspent funding from two declined grant awards which did not result in executed grant agreements in 2016. These reallocations will be considered in 2017.

Overall, the 2016-2017 grant program has built the foundation for carpet recycling networks in both Northern and Southern California.

6.3 Measuring Market Development

2016 saw a significant increase in Tier-2 manufacturer use of non-nylon recycled output in products that have shipped and sold. Tier-2 manufacturer pounds shipped and sold increased from 11.8 million lbs in 2015 to 17.7 million lbs in 2016, a 50% increase (See Section 5.11 – Figure S).

Figure S illustrates the evolution of the Tier-2 manufacturer non-nylon subsidy since it was put in place in Q4 2013. Subsidies are paid out only on products shipped and sold, based on the number of pounds of recycled output utilized as a feedstock for each product. An additional 2 million pounds of recycled output from processors were purchased by Tier-2 manufacturers for the production of secondary products during 2016, and will be eligible for subsidies upon sale. This growth is attributable to the Tier-2 manufacturer non-nylon subsidy put in place in Q4 2013, but which began to gain traction with increased subsidy and growth incentive payout levels in 2015. The growth incentive was deactivated as of December 31, 2016.

In 2016, two new companies signed contracts to join as Tier-2 manufacturers, and another company opened a second facility in California, ending the year with ten active Tier-2 manufacturers requesting subsidies. Two of these facilities are located in California. (See Appendix 10.5 for a list of Tier-2 manufacturers.)

Note that the Tier-2 manufacturer landscape described in this report reflects only companies that use non-nylon carpet, the current focus of California Program subsidies. Secondary manufacturers using calcium carbonate are also not included in these figures. Calcium carbonate shipped and sold is captured as Tier-1 processor recycled output and reported in Section 5.7. Tier-1 processors reported 2.4 million lbs of recycled output shipped and sold for use in the manufacturing of secondary products, such as some of those referenced within grants.

6.4 Market Shift

The number of non-nylon products shipped and sold during 2016 continued to expand, reflecting a variety of products being offered by Tier-2 manufacturers. Tier-2 manufacturers reported 13 unique non-nylon products in the following general categories:

- Bedding
- Carpet Pad/Cushion
- Composite Lumber
- Erosion Control
- Flooring Underlay
- Insulation
- Mattress Pads
- Molded Plastics
- Packaging
- Plastic Pellets
- Water Heater Blankets

The program began collecting this data in Q3 2015 and will continue to track progress in both number of pounds of recycled output utilized as well as the number of secondary recycled carpet content products offered.

Carpet cushion usage brings recycling full circle by using recycled carpet to manufacture a new carpet pad product. The Program expects the non-carpet cushion segment to shrink while other product sectors to expand in the near future. Carpet cushion still makes up over 65% of Tier-2 manufacturer non-nylon products shipped and sold.:

Additional recycled carpet products are made with nylon recycled PCC, as well as calcium carbonate recycled PCC backing. However, these products are not reported to CARE as they are not presently eligible to receive subsidies. In 2016 in order to support the new Cycle 1C procurement grant, a survey of secondary manufacturers was conducted to inform product listings available on the Program's [Products webpage](#). Manufacturer listings are voluntary and may not include all available products containing California recycled PCC. The webpage and [flyer](#) contain approximately 25 products available from nine vendors.

6.5 New Product Development and Currently Available Recycled Products

Companies developing new products using California recycled output in 2016:

- Carpet Solutions will be producing indoor/outdoor chairs in various colors.
- [Reliance Carpet Cushion](#) undertook several efforts to find alternative uses for this product, ranging from geotextile use under roadways, golf course sandtrap liners, as well as the potential coating of the cushion with rubber for various uses; none have proven feasible to date, but efforts continue.
- *[SafePath Products](#), a custom ramp manufacturer, and [South Bend Modern Molding](#), a manufacturer of molded rubber products such as mats and highway sound barriers, opened a facility in Chico, California in 2016 to manufacture products that use recycled output including: ADA transition ramps, entry level



Various products from SafePath Products

landing ramps, porous walkway systems, rubber garden edging materials, and rockwall barriers. Other products are under development.

- [West Coast Rubber Recycling](#), in Hollister, CA, produces tire-derived aggregate (TDA) as large shreds of old tires used as backfilling applications. The Program introduced the feedstock conversion concept to WCRR, which successfully tested carpet through its existing tire shredding equipment. This led to the concept of carpet-derived aggregate (CDA) as a new product with similar civil engineering uses. The product is in the early stages of new product development. The Program facilitated a discussion with [GHD Engineering](#), the engineering firm that continues to work on TDA development and new project uses, about CDA's feasibility in civil engineering applications. A grant proposal was in the process of being generated during 2016.

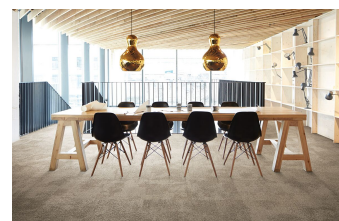
See also Section 6.2.1.2 (Cycle 1A and Cycle 1B 2016 Grantees and Projected Outcomes) for new products being developed by 2016 grant recipients.

Companies that offered new or expanded product line using California recycled output in 2016:

- [American Fiber Cushion](#) uses PET to manufacture carpet cushion.
- Landfill CLEAR is producing non-nylon pellets for use in secondary products.
- *[Sierra Mat](#) produces mats, wheel stops and landscape pavers of rubber, plastic and post-consumer carpet in Modesto, California.
- Trin Polymers uses PCC derived polypropylene in its shelves and toolboxes.



Sierra Mat Wheel Stops



Interface Composure Carpet Tile

Companies that continue to offer products using California recycled output in 2016:

- *[Bonded Logic](#) uses recycled output in building and acoustical insulation, water heater blankets, mattresses and pillows.
- Columbia Recycling uses polypropylene in melt-filtered pellets.
- *[Ecostrate](#) combines recycled carpet with recycled plastic to manufacture traffic signs, vehicle mud flaps, flooring and core laminate, thermoforming panels, and indoor signage.
- [GeoHay](#) uses recycled output in storm water and waste management products that protect against erosion, curb inlet filters to avoid storm drain flooding and in hydrocarbon erosion products.
- [Interface](#), [Shaw](#) and [Tandus-Centiva](#) use recycled output in their carpet tiles.
- [MP Global Products](#) uses recycled output in its carpet underlayment
- [Reliance Carpet Cushion](#) uses the recycled PET carpet materials to manufacture its EcoSoft carpet cushion



Reliance Carpet Cushion

*Indicates DoubleGreen™ labeled products containing recycled California PCC plus at least one other post-consumer recycled material.

6.6 Market Development and Outreach

In 2016, CARE (Tinney) participated in a number of conferences and meetings on behalf of the California Program to further the conversation about recycled carpet products:

- Participated in CalRecycle's Recycling Marketing Development Zones (RMDZ) Zone Works conference.
- Attended Fiberon and American Fiber Cushion CalRecycle meetings, where heard forecasts of substantial demand for quantities of PCC fiber.
- Met with ReFiber to see first filtration project finished in Davis, which could be a substantial market for PET fiber as planned projects materialize.
- Worked with GHD Engineering on their feasibility study on the use of recycled PET carpet in civil engineering applications. Report due in January 2017. This could be another substantial market for PET fiber based upon the successful TDA model.
- Began working with Sierra Rubber and Mat on the use of calcium carbonate as a soil additive or conditioner, coordinating with the California Healthy Soils Initiative. Early applications portend a potential market of 25 million lbs annually. More testing needed to confirm suitability for various soil conditions.
- Made six product presentations to public entities: Caltrans architects and engineers, Citrus College, City of Carson, Contra Costa College, DMV architects and engineers, and Santa Clara County Recycling Committee (80 attendees total)
- Began helping CLEAR find uses for plastic pellets with existing California based product manufacturers of plastic goods.
- Helped Dick Kruse of Kruse Cushion Ride explore opportunities for producing horse arena fiber in California.
- Held multiple meetings with CRM Rubber, whom the Program is encouraging to begin processing carpet as well as tires.

6.7 Summary

The past year, the Program was able to make continuous and meaningful improvement in developing a market for recycled output within California. The Program applied the power of incentives, subsidies, grants, and technical assistance to spur expansion in the Tier-2 manufacturer market.

Recycling of waste carpet has proven again to be difficult and complex, more so than any of the other waste streams in California. Finding and keeping end markets for the quantities generated has been hindered by economic forces outside local control, as have all recycling material markets. Innovative uses and dynamic marketing opportunities, like Double Green™, have now begun to take hold in California. They will continue to grow as the development of a California carpet recycling industry is fueled by grant funding, technical assistance, and marketing provided by the Program, as well as the application of new entrepreneurial ideas in California.

7 Financing Mechanisms – Section 18944(a)(7)

The annual report shall include a description and evaluation of the program's financing mechanism, including whether or not the funding was sufficient to recover, but not exceed, the full cost of the stewardship program. The annual report shall include, but not be limited to, the following total program cost information, and include any supporting documentation. Any proposed change in the amount of the carpet stewardship assessment fee must be submitted to the department for re-approval (See Section 18943 Criteria for Plan Approval).

7.1 Total Program Cost – Section 18944(a)(7)(A)

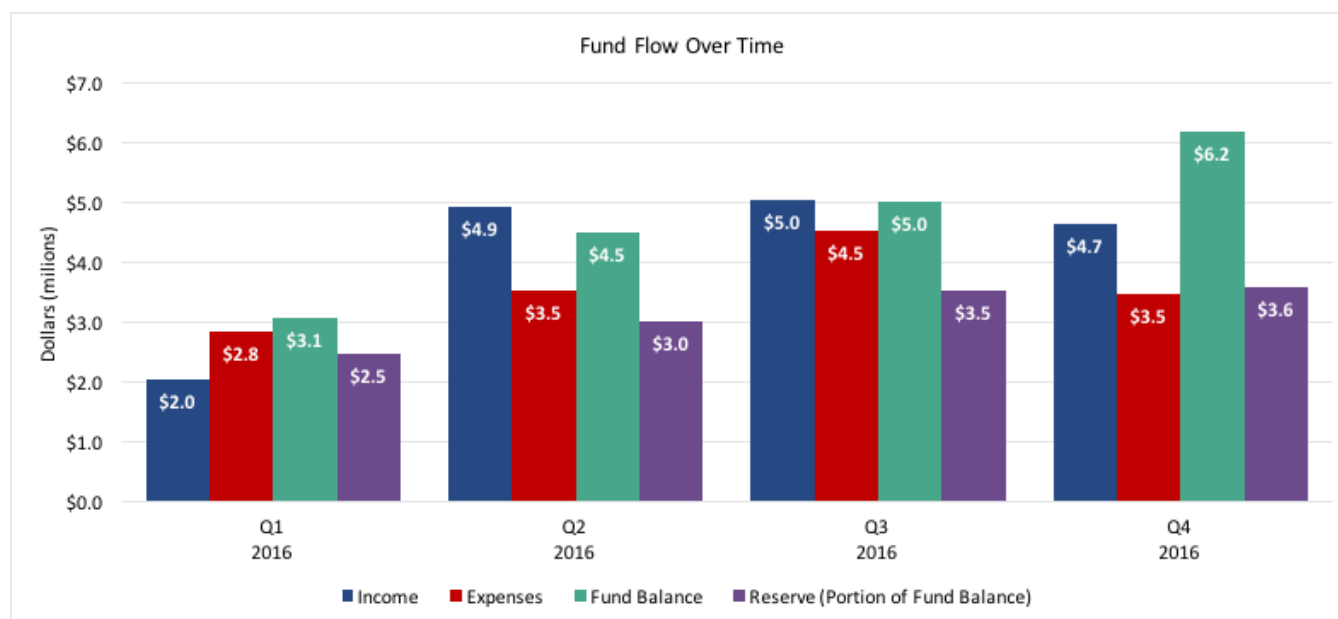
- **2016 Starting Balance⁸: \$3.9 million**
- **2016 Total Income: \$16.7 million**, comprised of \$16.7 million in assessment remittances paid by participating carpet mills and interest income of \$5,000.
- **2016 Total Expenses: \$14.4 million**
 - 70.0% Program Subsidies
 - 12.5% Administration (includes Program Administration (9.0%) and CalRecycle Fees (3.5%))
 - 4.3% Drop-Off Site (Collections) Program
 - 5.9% Grants
 - 4.9% Education and Outreach
 - 2.3% Legal and Accounting
- **2016 Ending Balance⁸: \$6.2 million**
- **2016 Ending Program Reserve^{8,9}: \$3.6 million**, (64%) of ending balance

Figure W summarizes the revenues, expenditures, and fund balance retained by quarter throughout 2016. It also summarizes the Reserve, a portion of the Fund Balance that comprises the majority of surplus funding (see Section 7.10).

⁸ Reported in accordance with the accrual basis accounting method.

⁹ Effective Sept 2015, the program adjusted its reserve calculation (sum of the last four quarters of total payouts, divided by four equals one quarter average) from two quarters to one quarter.

Figure W. Summary of Program Remittances, Expenditures and Balance Over Time (\$ in millions)



7.2 Cost (\$)/capita – Section 18944(a)(7)(B)

Based on California's population of roughly 39.25 million persons in 2016¹⁰, the \$14.4 million expended in 2016 on Program expenses accounts for approximately \$0.37 for each Californian, a 68% increase from \$0.22 from 2015.

7.3 Cost (\$)/pound collected – Section 18944(a)(7)(C)

In 2016, a total of 107 million lbs of PCC were gross collected. An average of 2.73 lbs of PCC was recovered per capita. Based on total funds expended in 2016 (\$14.4 million), the cost per pound collected is \$0.13/lb, a 63% increase over the cost per pound in 2015, \$0.08/lb. (see Section 4.2).

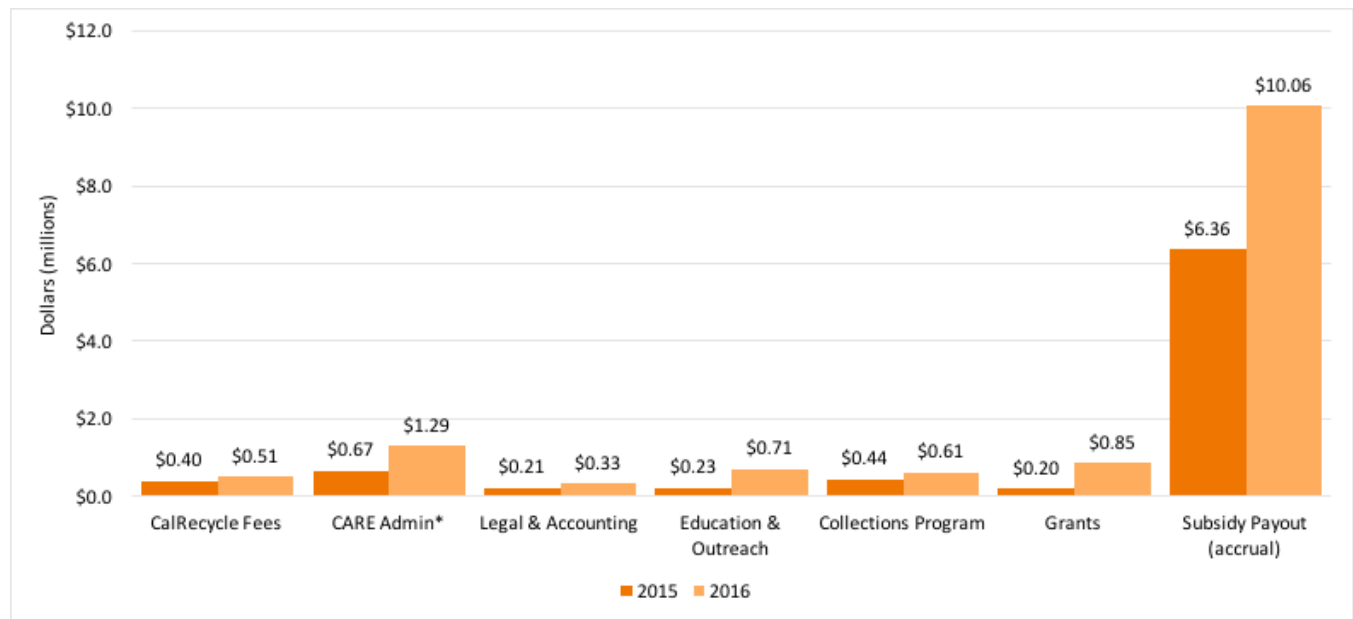
7.4 Education/Communications – Section 18944(a)(7)(D)

(% of total program cost)

To facilitate a higher level of engagement through education, outreach, and communications, the approved budget was increased from \$300,000 in 2015, of which \$226,900 was expended (24% below budget), to \$630,000 in 2016, of which \$709,575 was expended (18% above budget). 2016 expenditures under this category include the expenses for the California Council on Carpet Recycling launched in 2016 (\$31,548 spent; \$30,000 budgeted). Total expenditures under this category represent a 213% increase from 2015 to 2016, and equate to 4.9% of the total expenses incurred in 2016, up from 2.7% in 2015 (See Figure X and Figure Y). While education and communications activities are designed to support program goals, the Program relies primarily on subsidy expenditures as the principal mechanism for achieving increased recycled output, diversion and other program goals, consistent with figures below. Efforts continue to explore ways to tie education/outreach activities to operational performance metrics.

¹⁰ Per capita estimate is based off of U.S. Census Bureau population data of 39,250,017 for California in 2016.

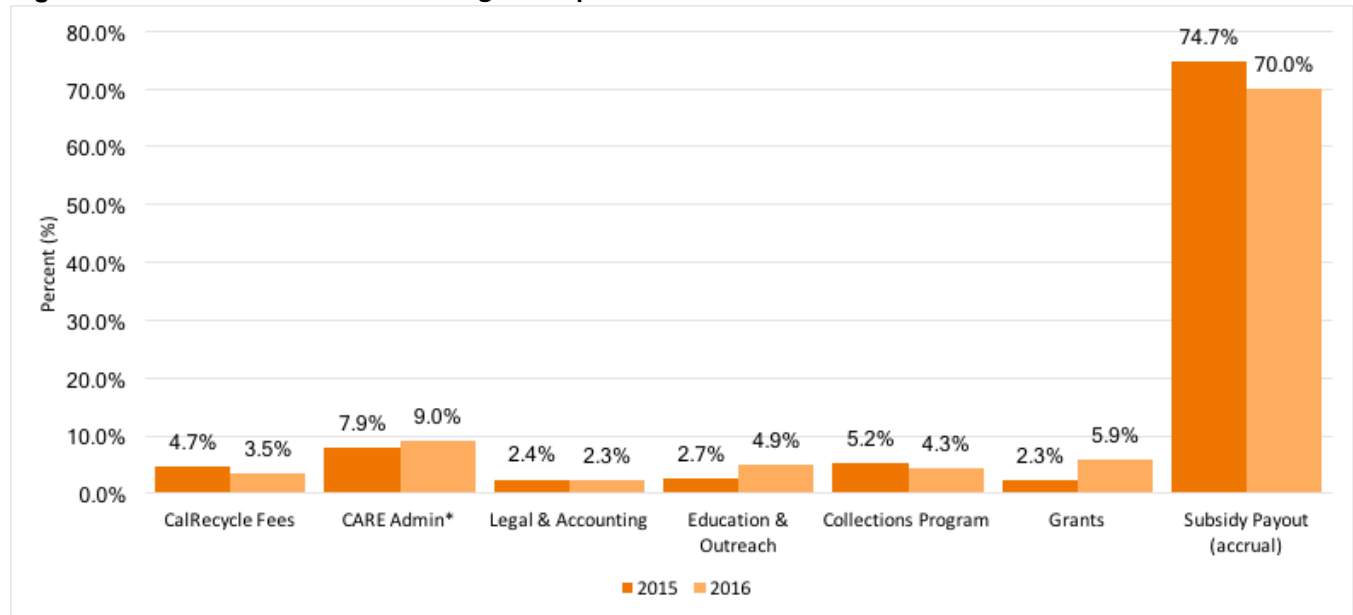
Figure X: 2015 vs. 2016 Total Program Expenses* **



*CARE Admin has changed over time as CARE has chosen to break out program elements in more detail.

**2015 subsidy payouts reported in the 2015 CARE California Carpet Stewardship Program Annual Report have been corrected in this report.

Figure Y: 2015 vs. 2016 Percent of Program Expenses*



*CARE Admin has changed over time as CARE has chosen to break out program elements in more detail.

7.5 End-Of-Life (EOL) Materials Management – Section 18944(a)(7)(E)

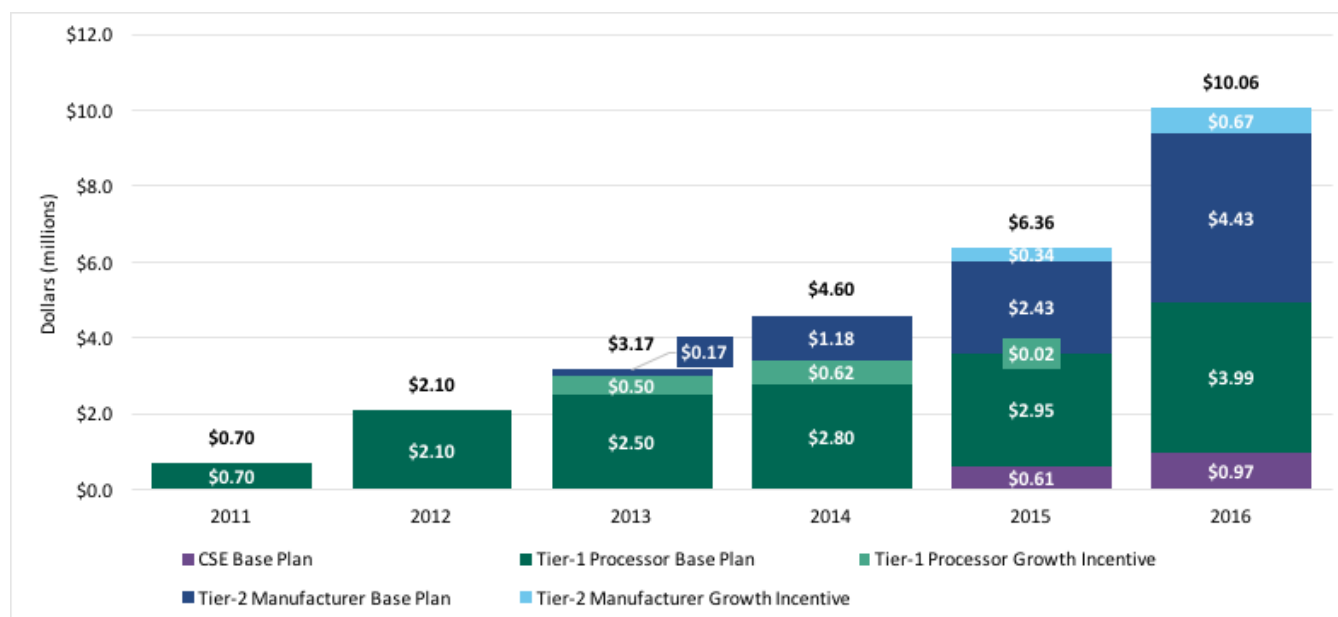
(% of total program cost)

For the purpose of this report, EOL is defined as activities occurring at the point when a product is discarded by the consumer or the end of the useful life of a product, whichever comes first. EOL is assumed to include such activities as reuse, recycling, secondary product manufacturing, energy recovery, incineration, and landfilling. In 2016, \$11.5 million in Program resources were directed to support EOL materials management in the following amounts:

1. **Gross Collections:** The California Program expended \$613,728 to operational support for 33 drop-off sites in 33 participating counties (See Section 4.2). This is an increase from the \$441,376 spent on the Collections Program in 2015.
2. **Grants:** In addition to the university grant element launched in 2015, Cycle 1A/1B grants were awarded in 2016 to support collection, recycling, and secondary manufacturing infrastructure and product testing. In 2016, \$852,764 of grant funds were expended, a 334% increase from the \$196,271 expended by the university grant element alone in 2015. Grant terms continue into 2017; remaining grant balances, including retention funds, are expected to be expended in 2017. Unexpended grant funds may be reallocated.
3. **Recycling:** The bulk of Program resources support the conversion of gross collections into recycled output materials by participating Tier-1 processors and use of generated recycled output as feedstock by Tier-2 manufacturers. In 2016, \$10,061,168 was paid via the following subsidies and incentives supporting recycling (See Figure Z):
 - a. Tier-1 Processor and Tier-2 Manufacturer Base Subsidies:
 - i. Type 1 recycled output (recycled output within ash content thresholds, currently less than 25% ash): \$4 million
 - ii. Type 2 recycled output (recycled output with higher ash content thresholds, currently more than 25% ash); includes calcium carbonate and carcass): \$4.4 million
 - b. Growth Incentives for exceeding Tier-1 Processor Type 1 target threshold of 11 million lbs per quarter: \$0.00
 - c. Growth Incentive for exceeding Tier-2 non-nylon manufacturer target thresholds of 2 million lbs for Q1 and Q2, and 3.5 million lbs for Q3 and Q4: \$674,000
 - d. Tier-2 Manufacturer Incentives (includes base payouts and growth incentive): \$5.11 million
 - e. Collector/Sorter Entrepreneur (CSE) Base Plan Subsidy (reporting incentive and whole carpet collection subsidy): \$926,316
 - f. Reuse Subsidy for Tier-1 Processors and CSEs (broadloom and carpet tile): \$92,593
4. **Energy Recovery:** Waste-to-Energy (WTE) does not receive subsidy payouts under the current Plan. In 2016, Carpet As Alternative Fuel (CAAF) saw minimal use (\$1,600) and Kiln payouts (\$102,500) accounting for 1% of total subsidy expenditures¹¹
5. **Incineration:** No incineration was reported during the reporting period. No subsidies are offered for incineration.
6. **Disposal:** Disposal figures are reported in Section 5.6.5. No subsidies are offered for disposal.

¹¹ See additional discussion related to Kiln pounds and expenditure in Section 5.6.4 and Section 7.9.1.

Figure Z. Summary of Subsidy Funds Paid to Processors Over Time by Type*



*2015 subsidy payouts reported in the 2015 CARE California Carpet Stewardship Program Annual Report have been corrected in this report.

7.6 Program Administration – Section 18944(a)(7)(F)

Total % program cost, including annual administrative fee for service payments to CalRecycle

Program administration includes fees to CalRecycle (3.5%) and general administrative costs (9.0%) related to overall Program management and implementation by CARE staff and contractors. California Program Administration in 2016 included apportioned CARE Executive Director, Finance Manager and Administrative Support staff, California Program Manager, two California Senior Associates, California Grants Manager, and technical assistance provided by Tinney Associates. Program administration expenses (including CalRecycle fees) were 12.5% of overall 2016 Program expenditures (See Table 15). Legal and accounting services further support Program administration especially related to assessment remittance reporting and fund management, subsidy reporting and payouts, Agreed Upon Procedures (AUP) reviews, legal oversight, financial audits, grant administration, and other related activities.

Table 15. Total Program Expenses in 2016

Program Expense (in thousands)	Q1	Q2	Q3	Q4	2016 Total	% of Total Program Expenses
CalRecycle Fees	\$103	\$0	\$89	\$314	\$507	3.5%
California Program Admin*	\$253	\$358	\$332	\$352	\$1,294	9.0%
Legal & Accounting	\$36	\$116	\$108	\$69	\$329	2.3%
Education & Outreach	\$152	\$264	\$171	\$122	\$710	4.9%
Collections Program	\$145	\$142	\$321	\$5	\$614	4.3%
Grants	\$32	-\$3	\$713	\$111	\$853	5.9%
Subsidy Payout (accrual)	\$646	\$2,289	\$2,755	\$4,371	\$10,061	70.0%
TOTAL Expenses	\$1,367	\$3,166	\$4,490	\$5,344	\$14,367	100.0%

*Definition of California Program Admin expenses has changed over time as CARE has chosen to break out program elements in more detail.

7.7 Governance – Section 18944(a)(7)(G)

(Program oversight as % of total program cost)

Program governance is provided by CalRecycle. In 2016, the Program paid \$506,563 to CalRecycle for their role in providing governance support and oversight on behalf of the state of California, equivalent to 3.5% of total 2016 Program expenditures.

7.8 Total Cost to Local Government (if applicable) – Section 18944(a)(7)(H)

According to CalRecycle's 2014 Disposal-Facility-Based Characterization of Solid Waste in California, an estimated 1.8% (+/- 0.6%) of California's overall disposed waste stream is composed of carpet. Based on this understanding, 1.8% of local government disposal costs could be attributed to management of discarded carpet.

The Program does not currently track the costs of managing discarded carpet incurred by local governments, and does not require any direct contribution by local governments. However, some local governments may support Program efforts financially, in line with their local waste diversion goals. Local governments participating in CARE's public drop-off site program may see financial benefits through offset costs of trailer and bin storage fees, transportation fees, and tip fees charged by receiving CSEs and Tier-1 processors incurred by the Program. Local governments/disposal sites may continue to charge tipping fees for carpet recycled via the drop-off site program, although sites are encouraged to offer reduced tip fee for source-separated carpet prepared for recycling. The Program does not currently provide funds to offset labor costs that may be incurred as part of participation in the drop-off site program.

7.9 Summary of Expenses – Section 18944(a)(7)(I)

Amount of the assessment, aggregate assessment funds collected, how spent and amounts of each major expenditure a. Funds, if spent on CAAF, must be supported with documentation reporting on economic and environmental impacts and that incentives shall expire, if they no longer serve a benefit.

Table 16. Summary of Program Income and Expenses by Category

Summary of Expenses	Amount/Description
Amount of Assessment	\$.10 per sq yd of carpet sold in CA from 01/01/2016 through 03/31/2016 \$.20 per sq yd of carpet sold in CA from 04/01/2016 through 12/31/2016
Total Assessment Remittances	\$ 16.7 Million
Total Interest Income	\$ 5 Thousand
EOL ²⁴ Base Incentive Payout (Type 1, Type 2, CAAF, Kiln Incentives)	\$ 3.4 Million \$ 109 Thousand
EOL Bonus Subsidy Payout (Type 1)	\$ 35 Thousand
EOL Tier-2 Subsidy Payout (base and growth incentives)	\$ 5.1 Million
CSE Incentive Payout	\$ 967 Thousand
EOL Gross Collection Payout (Rural County Program Storage/Transportation)	\$ 614 Thousand
Marketing, Education, Outreach	\$ 710 Thousand
Grant Program	\$ 853 Thousand
Program Administration	\$ 1.3 Million
Program Governance (CalRecycle Fees)	\$ 507 Thousand
Total Program Cost	\$14.4 Million
Cost per Pound of Gross Collection	\$ 0.13
Cost per Capita	\$ 0.37

The Program prioritizes subsidy expenditures which incentivize CSEs, Tier-1 processors, and Tier-2 manufacturers based on actual pounds of PCC material managed, shipped, and sold/donated. In this way, payouts are linked to direct market results increasing accountability and tying Program investments to market-based solutions. In 2016, the Program also increased expenditures in other strategy areas including grants, collections, education/communications, and administration to further support Program goals. Subsidies remained the highest strategy area, at nearly 70% of Program expenses in 2016. Grants include only direct dollars paid out to grantees at 6% of total expenses. Collection refers only to the Program-supported public drop-off site program supporting 33 sites in 2016 at 4.3% of expenditures. Education/communications increased in 2016 to 4.9% of expenditures, while California Program administration increased to 9%. CalRecycle fees as a percent of expenditures fell from 4.7% to 3.5%.

Please refer to Figures X and Y in Section 7.4 for additional information on Program expenses.

7.9.1 Economic and Environmental Impacts of CAAF and Kiln

In 2016, CAAF accounted for 0.02% of discards and 0.0% of diversion. Subsidies paid to CAAF totaled \$1,600, just 0.02% of total subsidy payouts.

Kiln utilization decreased by 50% in 2016 to 3.4 million lbs from 6.9 million lbs in 2015, and accounted for 1.0% of discards and 1.0% of diversion. Subsidies paid to Kiln totaled \$104,000, just 1.02% of total subsidy payouts. Kiln utilization as an alternative to WTE or landfill is considered a preferred disposition and is counted toward landfill diversion figures. With this decline, CAAF/Kiln only accounted for 1.04% of associated subsidy expenditures, down from 3% in 2015 (CAAF/Kiln are presently capped at 15% of subsidy payouts).

CAAF/Kiln subsidies provide an economic incentive for processors to choose CAAF or Kiln disposition over landfill disposal for material components that are not able to be diverted via higher use recycling efforts.

7.10 Surplus Funding– Section 18944(a)(7)(J)

If any, and how it will be applied to reduce program costs

The starting fund balance at the beginning of 2016 was \$3.9 million. During the calendar year, program revenues totaled \$16.7 million, comprised of \$16.7 million in assessment remittances paid by participating mills and interest income of \$5,000. Total expenditures in the form of subsidy payouts and other expenses totaled \$14.4 million during the term, or 86% of remittances. At the close of 2016, the Program's total ending fund balance was \$6.2 million. Effective September 2015, the Program adopted a one quarter average reserve. The Reserve changes quarterly with the level of payouts.

7.11 Assessment Rate– Section 18944(a)(7)(K)

An evaluation of the assessment rate

Effective April 1, 2016, the assessment rate increased from \$0.10 to \$0.20/sq yd of carpet sold in California throughout the reporting period. The increased assessment was deemed necessary to fund expanded and enhanced subsidy increases corresponding to the targeted growth in recycled output pounds and other programmatic goals. In September 2016, the Program requested a third assessment increase from \$0.20 to \$0.25/sq yd to support additional programmatic improvements. This increase goes into effect January 1, 2017. The latest assessment increase represents a 500% increase in the per square yard assessment since the program began in July 2011.

8 Outreach and Education – Section 1844(8)

Statutory Citation - Section 18944(a)(8)

List educational outreach activities in the stewardship plan. Provide a description of educational materials that were provided to retailers, consumers, carpet removers/installers, contractors, during the reporting period (provide electronic samples). Identify the method used to determine the effectiveness of educational and outreach surveys (e.g., surveys, hits on specific web pages, number of participants at events, etc.). Education and outreach materials may include, but are not limited to, signage, written materials, advertising or other promotional materials pursuant to Section 42972 (a) (5) and Links to website(s) created and maintained by the manufacturer or stewardship organization.

8.1 Introduction

The CARE California Stewardship Program's education and outreach efforts in 2016 were conducted by the entire Program team, including CARE's Executive Director, California Program Manager Brennen Jensen, Senior Associates Lisa Mekis and Jared Zitron, the environmental marketing agency Gigantic Idea Studio (GIS), market development consultant Tinney Associates, and Abbie Beane, California Grants Manager. (Market development efforts are addressed in Section 6 - Market Development. Electronic samples of educational materials are presented in Appendix 10.9.)

The education and outreach budget increased significantly in 2016. Ongoing communications with retailers, drop-off sites, local government, and other stakeholders were increased as more programs, such as grants, and more opportunities, such as new drop-off sites, became available. Print and electronic collateral was distributed. Engagement was measured via response rates, open rates, web page visits, and other uptake metrics.

8.2 Education and Outreach Strategies

The following strategies were employed by the Program in 2016:

- Continued retailer contacts to raise awareness of the Program's activities and as a distribution point for collateral. Reaching out to retailers allows for contact with harder-to-reach audiences, such as carpet installers and the general public.
- Expanded contacts with local government recycling coordinators and procurement officials to raise awareness of Program activities such as local drop-off sites and the availability of recycled carpet content products. Distributed collateral and a quarterly newsletter to keep recycling coordinators and others informed.
- Piloted additional marketing avenues, such as video creation and digital ads, to raise awareness of Program efforts, recognizing that even the increased budget is not enough for a statewide public awareness campaign.
- Worked with the newly formed Council on Carpet Recycling to gather stakeholder input.
- Raised awareness of recycled carpet content products with a website section and Buy Recycled messaging.
- Promoted new opportunities, such as the grant program, as a way to introduce CARE and the Program to a wider audience in local government and the public.

8.3 Retailer Outreach and Site Visits

Reaching California-based retailers was a centerpiece of 2016 outreach for the Program. Goals included:

- Making one-to-one contact with as many retailers as possible, with a goal of reaching at least 50% of the “universe.” By the end of 2016, 72% of retailers had been contacted, exceeding the 2016 goal.
- Informing retailers about the assessment, how to comply with AB 2398, and how assessment funds are used, with a view of encouraging them to inform staff and customers about recycling opportunities.
- Providing collateral and conducting outreach to installers and consumers.
- Defining the universe and creating a clean and accurate database of all retailers in California.

The total number of retailers is estimated based on validation by the Program outreach team and lists provided by CalRecycle Enforcement. 72% of all qualified California retailers were personally contacted either by phone or in-person visit in 2016 (See Table 17). Retailer visits also resulted in distribution of more than 36,000 brochures intended for consumers and 1,400 instructional sheets for installers. Maps showing location of visits are shown in Figure AB (Southern California) and Figure AC (Northern California).

Table 17: California Retailer Contacts in 2016

Original # on Retailer List	Disqualified*	Qualified Retailers	In-Person Visits	Phone Visit	Could Not Reach	% of Total Retailers Contacted	Remaining to Contact In 2017
3,901	2,295	1,606	975	187	106	72%	338

*Disqualified records were removed from the universe of retailers because they fell into one of these categories: out of business; non-carpet retailer; installer/cleaner; or duplicate (See Figure AA).

Figure AA: Reasons for California Retailer Disqualification from 2016 Outreach Process

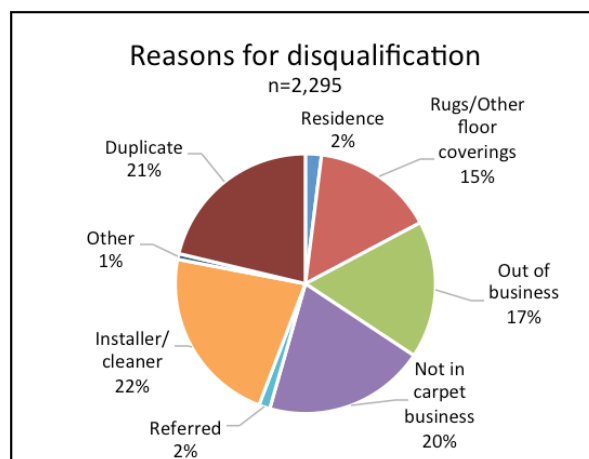


Figure AB: Southern Central California Retailer Visits (In-Person and Phone)

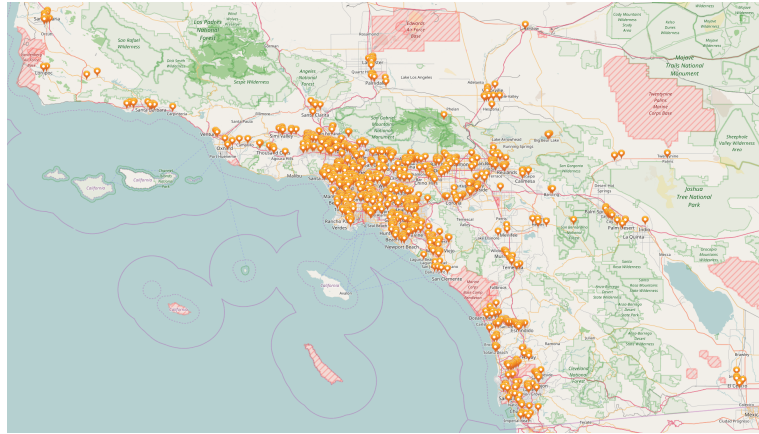
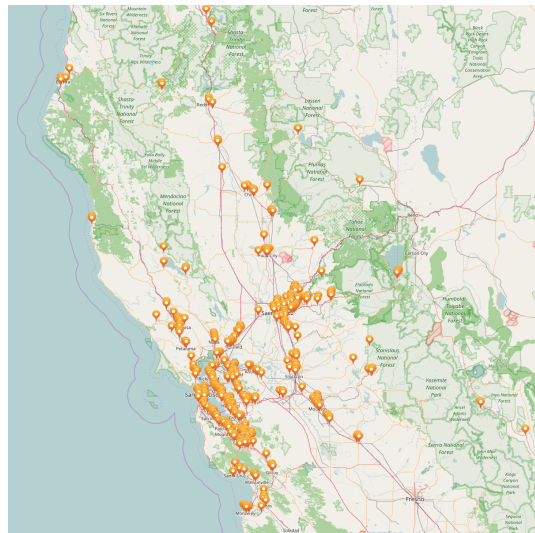


Figure AC: Northern California Retailer Visits (In-Person and Phone)



8.4 Assessment Change Campaigns

Assessment increases in April 2016 (up to \$0.20/sq yd) and January 2017 (up to \$0.25/sq yd) required two multi-touch communication campaigns in 2016. For each assessment, the following tactics were employed to alert retailers to the change (See Appendix 10.9 for sample materials):

- A letter and a follow-up postcard mailed to all California retailers
- Formal notice of the assessment change mailed to all carpet mills with a request to distribute the information to their retailer customers via their communication channels
- Email notices of the assessment change to all California retailers
- Social media posts (Twitter: [@CarpetRecycle](https://twitter.com/CarpetRecycle)) announcing the increase

- Press release to industry and California press
- Webinar to answer questions from retailers
- Dedicated landing page for retailers on the CARE website describing the change:
<https://carpetrecovery.org/ca-retailers/>
- Follow-up phone survey of 50 random retailers to ensure that the assessment change was understood and implemented.

8.5 Local Government Outreach

In 2016, the California Program expanded local government outreach through recycling coordinator and zone administrator communications, procurement collateral, and recycled product promotion. Program staff worked with local governments to identify potential new drop-off sites in each county, provide educational materials relevant for key target audiences including retailers and installers, and provide technical assistance recommendations on localized promotion especially in tandem with new collection opportunities.

Local government resources launched in 2016 included:

- New [Local Government](#) webpage on the CARE website
- California Drop-Off Site [Map](#) and Printable Flyer
- Quarterly Local Government E-news

Program staff met with 78 local government and private waste facilities representatives throughout the state to distribute local government packets, which contained the following (See Appendix 10.9 for sample materials):

- Drop-off Site Map
- FAQ for Local Government
- Program Steps (How to Become a CARE Drop-off Site)
- Program Overview for Local Government
- Brochure
- Container Options
- “How to Load a Trailer” Handout
- Signage for Drop-off Sites

Materials were also distributed at events including California Resource Recovery Association (CRRA) annual conference in August 2016, where CARE outreached as an exhibitor and hosted a multi-speaker session, which included a presentation highlighting resources for local governments.

The Program found larger municipalities required their own prescriptive contracts and protocols, in many cases taking far longer than anticipated. A few jurisdictions have declined to participate, although the program is continuing to work to increase the number of public drop-off sites to 58.

8.6 Installer Outreach

In 2016, the California Program worked to expand outreach to engage installer/contractors involved in the tear-out and disposal/recycling of carpet via three strategies:

- Drop-off site engagement;
- Bilingual installer flyers describing proper preparation of carpet for recycling;
- Custom installer flyers, distributed through drop-off sites and retailers where Program drop-off sites are active.

The primary mechanism for installer outreach has focused on engagement via the drop-off site program. Program staff works with local governments and drop-off site staff to identify mechanisms for engaging visiting installers. At many drop-off sites, scale house attendees are familiar with installers that regularly haul tear-out carpet to their facility. In these instances, distribution of site-specific bilingual flyers, with the help of on-site scale-house attendants, has been very effective in increasing recycling for newly established drop-off sites. As an additional incentive to installer/contractors, drop-off sites are encouraged to offer reduced tip fees source separated and properly prepared carpet for recycling.

In 2016, the Program developed the first installer-focused presentation for use in upcoming curriculum training with International Certified Flooring Installers (CFI), a leading carpet installation certification program. The curriculum will launch in early 2017.

In addition, in Q4 2016 an introductory video, [Fast Facts for California Carpet Installers](#), was created and posted to CARE's new YouTube channel. This is the first of at least two videos that will be created and promoted to installers across the state in 2017.

8.7 Drop-off Site Outreach

In 2016, GIS ramped up marketing activities following an increased E&O budget. By Q2, GIS created and distributed the following to Program drop-off sites (see Appendix 10.9 for sample materials):

- Custom, Bilingual (English-Spanish) Flyers: provide suggestions for anyone dropping off carpet for recycling; sites ordered 50-250 flyers apiece.
- Template for Public Service Announcements
- Template for Press Releases
- Template for Newsletters
- 18" x 24" Posters
- On-Site Signage

A phone survey of drop-off sites conducted in Q4 2016 shows that drop-off sites were generally pleased with and using the collateral provided, especially the bilingual flyers and the signs. Drop-off sites' need for more clear inclusion of carpet in their communications was identified, and marketing tips were included in the quarterly calls with sites.

In addition, the Program conducted a pilot ad campaign, setting up search engine ads for two drop-sites, Napa and American Reclamation in Los Angeles. Results were promising, with over 350 users sent to each of the two sites' websites. The program will be expanded in 2017 to help increase awareness and use of drop-off sites that recycle carpet. CARE will follow up with sites to assess the effectiveness of these efforts in increasing carpet collection.

8.8 Public Presentations, Workshops, and Webinars

8.8.1 Stakeholder Workshops

Gigantic Idea Studio assisted the California Program in planning, promoting, and facilitating two stakeholder workshops in California in March 2016 in Sacramento and Burbank. The five-hour workshops included presentations by the California Program and CalRecycle. 40 participants included non-government entities (NGOs), cities, local governments, Tier-1 processors, Tier-2 manufacturers, collector/sorter entrepreneurs (CSEs), CalRecycle, and other members of the newly-formed California Council on Carpet Recycling. GIS facilitated group discussion to gather input and highlight opportunities for collection, market development and communication to inform the California Carpet Stewardship Plan 2017-2021.

The workshops were promoted via mass email and individual invitations from the Program team.

8.8.2 2016 Presentations, Workshops, and Webinars by Audience

Retailers:

- Sonoma County Retailers Association (One presentation; February 2016)
- Webinar about the Retailer Assessment Increase (February 2016)
- Redwood Empire Flooring Association (One presentation; 40 retailers from three counties; April 2016)

Local Government and Drop-off Sites:

- Drop-off site quarterly calls with local government, drop-off sites, and CalRecycle Representatives (4 calls; more than 20 attendees each)
- Rural County Representatives of California Environmental Services Joint Powers Authority (RCRC-ESJPA) (Two presentations; March 2016; December 2016)
- California Resource Recovery Association (CRRRA) Conference (One presentation, tabling; August 2016)
- Six Post-consumer carpet (PCC) product presentations to local government procurement personnel (80 attendees total)
- CalRecycle's Recycling Market Development Zone (RMDZ) "Zone Works" Conference (Three presentations; 100+ attendees; April 2016)
- Webinar about the 1C Procurement Grants (June 2016)

Other Stakeholders:

- Stakeholder Workshops (mentioned in Section 8.8.1) (Two workshops; 80 attendees total; March 2016)
- Council meetings (Four meetings; 18 members plus Stewardship Planning Committee (SPC) Chair, CARE Executive Director and staff, two to four CalRecycle Staff (observers); February, March, April, June 2016)
- CARE Annual Conference (one presentation; 150 attendees; May 2016)

For market development and product presentations to public entities and industry experts, see Section 6.6 – Major Market Developments.

8.8.3 General Outreach

The Program continued general outreach efforts to stakeholders in 2016 including:

- Monthly [E-news](#)
- Regular [Blog](#) Articles
- Ongoing [Website](#) Updates
- Social Media (Twitter: [@CarpetRecycle](#))

8.8.3.1 Monthly E-news

The program sends a monthly e-newsletter to any stakeholder who opts in to receive it. In 2016, the opt-in e-news list grew from 700 to 1,800 recipients, with a strong average open rate of 31% and average click-through rate of ~14%. (Separate lists are maintained for retailers who have not opted in and for media to receive press releases.) E-news signup is promoted throughout the year on the website, at meetings and conferences, and in other digital and print communications.

8.8.3.2 Blogs

The California Program published 12 blogs on the CARE site in 2016, with topics ranging from stakeholder workshop updates to new products containing post-consumer carpet. Blogs are promoted via the e-news and Twitter.

8.8.3.3 Website

Website traffic for California-based visitors increased substantially in 2016:

- 13,583 California-based visits
- 8,359 California-based visitors
- 2:59 Average Session Duration, California-based visitors

Due to a Google Analytics error, reliable comparisons from 2015 to 2016 were not possible. Once the issue was fixed in Q4, the following comparisons were able to be made:

- The site had 4,258 California-based visits in Q4 2016, an increase of 36% over Q4 2015.
- The site had 2,954 unique California-based visitors in Q4 2016, an increase of 47% over Q4 2015.

In addition to frequent updates of the website for Tier-1 processors, Tier- 2 manufacturers, local government, installers, and retailers, new webpages were added on:

- California Council on Carpet Recycling
- California Local Government – Recycling Coordinators
- Grants
- Buy Recycled/Recycled Carpet Products
- California Program Governance

8.8.3.4 Social Media

CARE has a Twitter account ([@CarpetRecycle](#)) that the California program uses to publicize activities, events, and news. The account had 233 followers as of the end of 2016. CARE began experimenting with promoted tweets in December 2016, when a promoted (paid ad) tweet promoting the drop-off site map garnered 46,000 impressions and 1,200 engagements, including 48 clicks. CARE tweeted 93 times in 2016, with non-promoted tweets garnering 29,000 impressions and 271 engagements (clicks, likes, and retweets).

8.9 Summary

The California Program's ongoing outreach efforts are bearing fruit with increased awareness and uptake of its programs and services. Opportunities for more general public communication are becoming a reality as the Program continues to take shape with increased service opportunities to be shared with a broader audience. As more drop-off sites provide convenient recycling and new recycled carpet content products become available, there are more opportunities for communicating the good news about recycling carpet. When one examines the Program's efforts and accomplishments holistically, there has been continuous and significantly meaningful improvement in 2016.

9 Audits - Section 18944(9)

Statutory Citation

The annual report shall include an independent financial audit funded from the carpet stewardship assessment. The audit shall be conducted in accordance with auditing standards generally accepted in the United States of America, and standards set forth in Government Auditing Standards issued by the Comptroller General of the United States. The audit report shall also include a separate state compliance report on the carpet program requirements as directed by the department.

- (A) The department may investigate further. If the department decides to further review the findings of the independent auditor, the review will be conducted based on same information the individual manufacturer or stewardship organization provided to the independent auditor.*
- (B) Financial audits must be prepared by a Certified Public Accountant.*
- (C) The department may request supplemental information from the individual manufacturer or stewardship organization during the course of review of a manufacturer- or stewardship organization-submitted financial audit, if necessary.*
- (D) The department will inform the individual manufacturer or the stewardship organization within 60 days of the results of its review.*
- (E) If after conducting further review of the audit, the Department deems it to be necessary, the Department may conduct its own audit.*

The financial statements of CARE and the California Carpet Stewardship Plan 2011-2016 for the year ending December 31, 2016 were audited by an independent Certified Public Accounting firm. The Audited Financial Statements and a Performance Audit are found in Appendix 10.10.

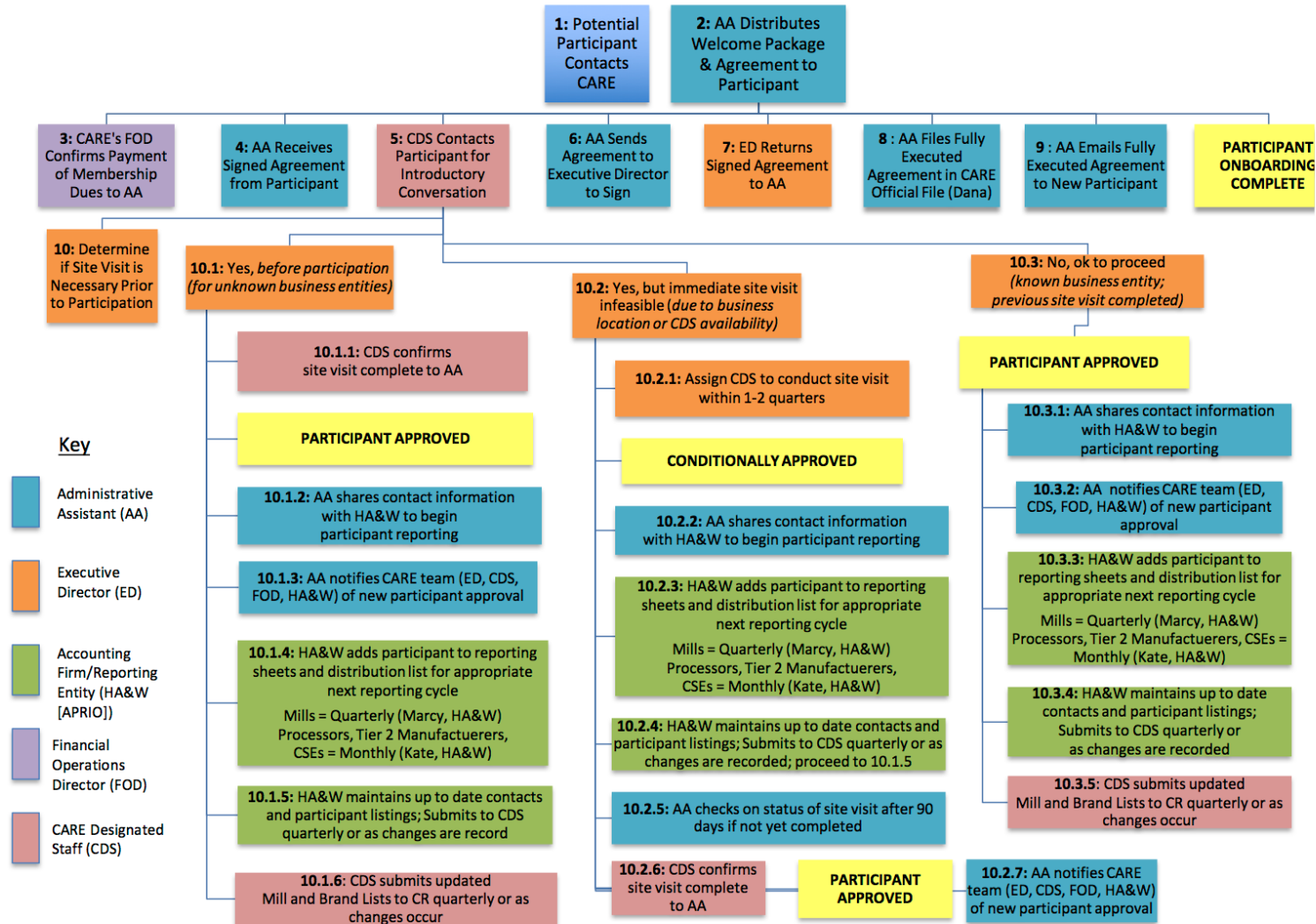
10 Appendices

10.1 Summary of Subsidy and Incentive Payouts

Count	Subsidy/Incentives	Payout Rate	Description	Timeline/Date of Action	Addendum	Notice
CSEs						
1	CSE Reporting Incentive (CSE)	\$1,000/month	No change anticipated	Initiated 2014	N/A	Incentive; not subject to guaranteed timeline
CSEs + Tier-1 Processors						
2	Whole carpet shipped and sold for recycling (Collection)	\$0.02/lb	For self-collected, sorted, sold, and shipped CA pounds; maximum payout \$150,000/quarter or \$400,000/year to any participant	California Program-approved under current Plan purview; retroactive to Q3 2015	3	Subject to adjustment, beginning Q4 2017
3	Reuse	\$0.10/lb	For self-collected and shipped/sold or donated carpet tile or broadloom for the purpose of reuse	Effective Q2 2015; clarified June 2015 as applicable to the reuse of both broadloom and carpet tile, and retroactive to Q2 2015	1, 3	Subject to adjustment, beginning Q4 2017
Tier-1 Processors						
4	Tile Recycled	\$0.10/lb	For carpet tile recycled output	Effective Q2 2015	1	Subject to adjustment, beginning Q4 2017
5	Type 1 Recycled Output Payout	\$0.10/lb	Adjusted subsidy payout from \$0.06/lb to \$0.10/lb, tied to market indices; [Type 1 refers to recycled output within ash content thresholds, currently less than 25% ash]	In Plan v.3.2.2 – March 2014; base payout rate adjustable, may be tied to market indicator using Economic Model	3	\$0.06/lb subject to adjustment, beginning Q4 2017; \$0.04/lb adjustable quarterly effective Jan. 2016.
6	Type 2 Recycled Output Payout	\$0.03/lb	Type 2 refers to recycled output with higher ash content thresholds, currently more than 25% ash.	In Plan v.3.2.2 – March 2014	N/A	Subject to adjustment, beginning Q4 2017
7	Type 2 Calcium Carbonate Payout	\$0.17/lb	Non-fiber recycled output containing calcium carbonate for use as feedstock in secondary products; currently \$0.17/lb	Change 1, effective Q2 2015; change 2, in June 2015; change 3, effective Q3 2015; [For use as a raw material (recycled output feedstock) only]	1, 3	Subject to adjustment, beginning Q4 2017
8	Carpet As Alternative Fuel (CAAF)	\$0.03/lb	No change; for process waste unable to be recycled, diverted to energy recovery via CAAF	In Plan v.3.2.2 – March 2014 [combined CAAF + Kiln payouts must be exceed 15% of total subsidies]	N/A	Subject to adjustment, beginning Q4 2017
9	Cement Kiln	\$0.03/lb	No change; for process waste unable to be recycled, diverted to energy recovery via cement kiln	In Plan v.3.2.2 – March 2014 [combined CAAF + Kiln payouts must be exceed 15% of total subsidies]	N/A	Subject to adjustment, beginning Q4 2017
10	Bonus (Incentive) for Type 1 Output Growth	\$0.10/lb	Incentive paid on pounds of Type 1 recycled output to encourage growth; applied to pounds above quarterly adjustable threshold	In Plan v.3.2.2 – March 2014, initially set at 8.5 million lbs/qtr; current threshold set at 11 million lbs/qtr, effective Q3 2014	N/A	Incentive ; not subject to guarantee timeline; deactivated effective Q1 2017
Tier-2 Manufacturers						
11	Tier-2 Manufacturer Non-Nylon Payout	\$0.25/lb	For Type 1 non-nylon recycled output used as a feedstock in the manufacture of secondary products; currently \$0.25/lb	Change 1, effective Q2 2015; change 2, retroactive to Q3 2015	1, 3	Subject to adjustment, beginning Q4 2017
12	Tier-2 Manufacturer Non-Nylon Growth Payout Incentive	\$0.10/lb	Incentive paid on pounds of Tier 2 non-nylon to encourage growth; applied to lbs above quarterly adjustable threshold	Effective Q2 2015, initially set at 2 million lbs/qtr; current threshold set at 3.5 million lbs/qtr, effective Q3 2016	1	Incentive ; not subject to guarantee timeline; deactivated effective Q1 2017

10.2 Participant Onboarding Procedure

CA Carpet Stewardship Program – Internal Participant Onboarding Procedure



Rev. 12/28/16

10.3 List of Collector/Sorter Entrepreneurs (CSEs)

Table 4. CSEs Requesting & Receiving Funding During 2016

	Parent Company	City	State	Status
1	A-1 Planet Recycling	Phoenix Chula Vista	AZ CA	Active
2	CLEAR	Lincoln	CA	Active; CA facility operational in April 2016
3	Carpet Solutions	Carson	CA	Active
4	Construction & Demolition Recycling, Inc. (CDR, Inc.)	Carson	CA	Active
5	Gone Green Recycling	South Gate	CA	Active; began reporting in September 2016 but only handled pad during 2016
6	GreenWaste Carpet Recycling	San Jose	CA	Active
7	Los Angeles Fiber Co. (LA Fiber)	Vernon	CA	Active

10.4 List of Tier-1 Processors

Table 5. Tier-1 Processors Requesting & Receiving Funding in 2016

	Parent Company	City	State	Status
1	Aquafil USA	Cartersville	GA	Active; began reporting in February 2016
2	Bro-Tex	Saint Paul	MN	Active; began reporting in June 2016
3	Carpet Solutions	Carson	CA	Active; CARE grant recipient
4	CarpetCycle	Newark	NJ	Active; began reporting in May 2016
5	CLEAR	Lake Villa Lincoln	IL CA	Active; opened second facility in CA in April 2016; CARE grant recipient
6	Columbia Recycling Corp.	Dalton	GA	Active
7	Gold Pond Corp.	Dalton	GA	Active
8	Interface, Inc.	Atlanta	GA	Active
9	Los Angeles Fiber Co. (LA Fiber)	Vernon	CA	Active
10	ReThink Green	San Leandro	CA	Inactive; ceased reporting as of April 2016
11	Shaw Industries Group, Inc.	Dalton	GA	Inactive; discontinued operations in late 2016 but continues to report
12	Tandus Centiva Inc.	Dalton	GA	Active
13	Wellman	Johnsonville	SC	Active; began reporting in March 2016

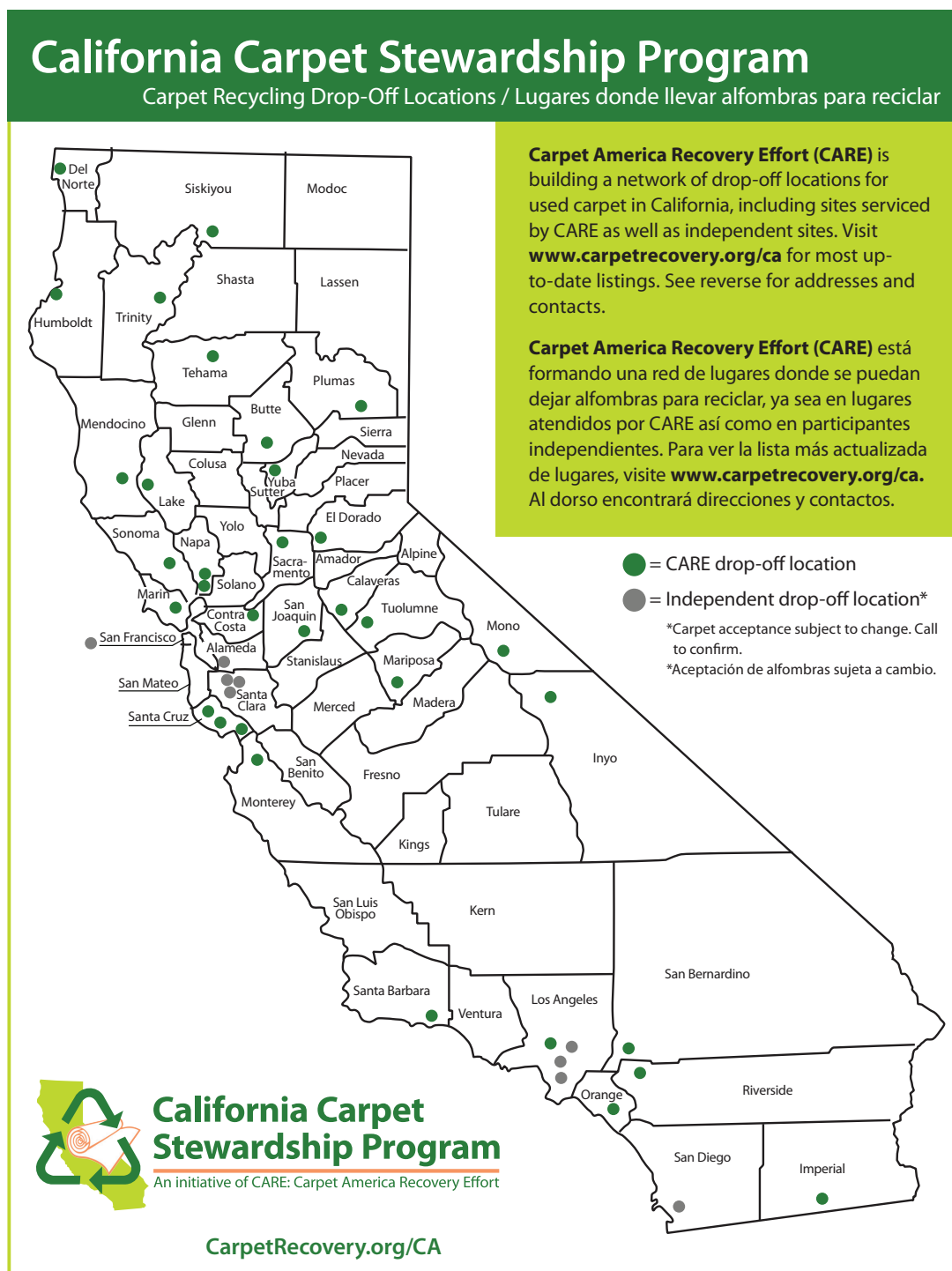
10.5 List of Tier-2 Manufacturers

Table 6. Tier-2 Manufacturers Requesting & Receiving Funding in 2016

	Parent Company	City	State	Status
1	American Fiber Cushion	Dalton	GA	Active; CARE grant recipient
2	Bonded Logic	Chandler	AZ	Active
3	M. Chasen & Son, Inc.	Irvington	NJ	Active; began reporting May 2016
4	CLEAR	Lake Villa Lincoln	IL CA	Active; opened second facility in CA in April 2016; CARE grant recipient
5	Columbia Recycling Corp.	Dalton	GA	Active
6	Fiber Commercial Technologies	Juniper	FL	Active; begin reporting in November 2016
7	GeoHay, LLC	Inman	SC	Active
8	MP Global Products LLC	Norfolk	NE	Active
9	Reliance Carpet Cushion	Vernon	CA	Active
10	Shaw Industries Group, Inc.	Dalton	GA	Active

10.6 Map and List of Drop-off Sites

Map and List of Program-supported Drop-off Sites presented below is current as of **December 2016**. New sites are being added regularly. Visit <https://carpetrecovery.org/ca/> to download the latest version. In 2017, a map inclusive of private drop-off sites will be developed.



California Carpet Stewardship Program

Carpet Recycling Drop-Off Locations / Lugares donde llevar alfombras para reciclar

Before you visit: Contact drop-off site to confirm participation, business hours, types of carpet accepted and identification required.

Antes de su visita: Comuníquese con el lugar donde llevaría las alfombras para confirmar que participan, el horario de atención al público, los tipos de alfombra que aceptan, así como la identificación que requieren.

ALAMEDA COUNTY

Fremont Recycling & Transfer
41149 Boyce Road
Fremont, CA 94538
510-252-0500

BUTTE/COLUSA COUNTY

Recology Butte
2720 South 5th Avenue
Oroville, CA 95965
530-342-4444

CALAVERAS COUNTY

Rock Creek Solid Waste Facility & Landfill
12021 Hunt Road
Milton, CA 95684
209-754-6403

CONTRA COSTA COUNTY

Contra Costa Waste Service
1300 Lloveridge Road
Pittsburg, CA 94565
925-473-0180

DEL NORTE COUNTY

Del Norte County Transfer Station
1700 State Street
Crescent City, CA 95531
707-465-1100

EL DORADO COUNTY

El Dorado Disposal/Waste Connections
4100 Throwita Way,
Placerville, CA 95667
530-295-2808

HUMBOLDT COUNTY

Hawthorne Street Transfer Station
1059 West Hawthorne Street
Eureka, CA 95501
707-268-8680

IMPERIAL COUNTY

Imperial Landfill
104 E. Robinson Road
Imperial, CA 92251
760-353-1100

INYO COUNTY

Bishop-Sunland Landfill
110 Sunland Indian Reservation Road
Bishop, CA 93514
760-872-4126

LAKE COUNTY

Lake County Waste Solutions
230 Soda Bay Road
Lakeport, CA 95453
707-234-6412

LOS ANGELES COUNTY

American Reclamation
4560 Doran Street
Los Angeles, CA 90039
818-552-4068

Carpet Pad Conversion

1429 W. 130th Street
Gardena, CA 90249
714-299-4206

Carpet Solutions
17100 Margay Avenue
Carson, CA 90746
310-886-3800

LA Fiber
4920 S Boyle Avenue
Vernon, CA 90058
323-277-0627

MARIN COUNTY

Marin Resource Recovery Center
565 Jacoby Street
San Rafael, CA 94901
415-485-5646

MARIPOSA COUNTY

Mariposa Landfill, Composting and Recycling Center
5593 Highway 49 North
Mariposa, CA 95338
209-966-5165

MENDOCINO COUNTY

Solid Waste Systems
3151 Taylor Drive
Ukiah, CA 95482
707-234-6410

MONO COUNTY

Benton Crossing Landfill
899 Pit Road,
Crowley Lake, CA 93546
760-937-2192

MONTEREY COUNTY

Sun Street Transfer Station
139 Sun Street
Salinas, CA 93901
831-424-5535

NAPA/SOLANO COUNTY

Devlin Road Transfer Station
889 Devlin Road
American Canyon, CA 94503
707-258-9005

Napa Recycling & Waste Services
820 Levitin Way
American Canyon, CA 94503
707-256-3500

ORANGE COUNTY

Sunset Transfer Station
16122 Construction Circle
Irvine, CA 92606
949-654-1562

PLUMAS COUNTY

Delleker Transfer Station
73980 Industrial Way
Delleker, CA 96122
530-832-4879

RIVERSIDE COUNTY

Robert A. Nelson Transfer Station/Agua Mansa MRF
1830 Agua Mansa Road
Riverside, CA 92509
951-786-0544

SACRAMENTO COUNTY

Florin Perkins Public Disposal Site
4201 Florin Perkins Road,
Sacramento, CA 95826
408-938-4958

SAN BERNARDINO COUNTY

West Valley MRF and Transfer Station
13373 Napa Street
Fontana, CA 92335
909-899-5501

SAN DIEGO COUNTY

A-1 Planet Recycling
1564 Jayken Way
Chula Vista, CA 91911
619-424-7545

SAN FRANCISCO COUNTY

Recology San Francisco
501 Tunnel Avenue
San Francisco, CA 94134
415-330-1400

SAN JOAQUIN COUNTY

Lovelace Transfer Station
2323 E. Lovelace Road
Manteca, CA 95336
209-982-5770

SANTA BARBARA COUNTY

MarBorg Industries C&D Facility
119 N Quarantina St
Santa Barbara, CA 93103
805-963-1852

SANTA CLARA COUNTY

Green Waste Recovery
625 Charles Street
San Jose, CA 95112
408-938-4958

GreenWaste Carpet Recycling

1201 North 15th Street
San Jose, CA 95112
408-938-4958

Zanker
675 Los Esteros Road
San Jose, CA 95134
408-938-4958

SANTA CRUZ COUNTY

City of Santa Cruz Resource Recovery Facility
605 Dimeo Lane
Santa Cruz, CA 95060
831-420-6270

Ben Lomond Transfer Station
9835 Newell Creek Road
Ben Lomond, CA 95005
831-336-3951

Buena Vista Landfill - Santa Cruz County

1231 Buena Vista Drive
Watsonville, CA 95076
831-454-5153

SISKIYOU COUNTY

Black Butte Transfer Station - Mount Shasta
3710 Springhill Drive
Mt Shasta, CA 96067
530-926-1610

SONOMA COUNTY

Industrial Carting
3911 Santa Rosa Avenue
Santa Rosa, CA 95407
707-585-8246
707-585-6017

SUTTER/YUBA COUNTIES

Recology Sutter - Yuba
3001 Levee Road
Marysville CA 95901
530-743-6933

TEHAMA COUNTY

Tehama County/Red Bluff Landfill
19995 Plymire Rd
Red Bluff, CA 96080
530-528-1102

TRINITY COUNTY

The Floor Store (Retail store)
1306 Nugget Lane,
Weaverville, CA 96093
530-623-6600

TUOLUMNE COUNTY

Cal Sierra Transfer Station
19309 Industrial Drive
Sonora, CA 95370
209-532-1413

10.7 List of Participating Mills*

	Parent Company	Sub Companies	City	State	Country
1	Alliance Textiles, Inc.	Metro Carpet	Cartersville	GA	USA
2	ATM Floor Covering, Inc.		Dalton	GA	USA
3	Beaulieu Canada Company		Acton Vale	Quebec	Canada
4	Beaulieu Group LLC	Aqua, Armstrong FashionSmart, Armstrong FashionSmart B, Beaulieu, Beaulieu Commercial, Beaulieu Engineered Fabrics & Fibers, Beaulieu of America, Bliss Aligned Dealer Program, Bliss by Beaulieu, Bliss Flooring Solutions, BOA Distributor Div., BoYu, Cambridge, Citation, Compass, Coronet Carpets, Coronet SFC, Hollytex, Interloom, Laura Ashley, Property Management Solutions, Pure, Royalist, Surfaces	Dalton	GA	USA
5	Bellbridge Inc.		Benicia	CA	USA
6	Bentley Prince Street (BPS Parent, Inc.)	Bentley Mills, Inc., Bentley Prince Street, Inc., Bentley Holdings, Inc.	City of Industry	CA	USA
7	Berkshire Flooring		Dalton	GA	USA
8	Best Carpet Values, Inc./W.R. Inc.		Chatsworth	GA	USA
9	Bloomsburg Carpet Ind., Inc.		Bloomsburg	PA	USA
10	Brintons		Kennesaw	GA	USA
11	CAP Carpet Inc.	Aircraft Interior Products, White Oak Carpet Mills	Wichita	KS	USA
12	Carpet Crafts, Inc.		Dalton	GA	USA
13	Catalina Carpet Mills, Inc.	Catalina Homes	Santa Fe Springs	CA	USA
14	Couristan, Inc.		Fort Lee	NJ	USA
15	Crossley Holdings of South Africa	Crossley Axminster, Inc.	Greenville	MS	USA
16	Daltonian Flooring Inc.		Calhoun	GA	USA
17	Design Manufacturing International, LLC	Cavan Carpets	Warminster	PA	USA
18	Design Materials, Inc.		Kansas City	KS	USA
19	ECMH, LLC	Cadence, Clayton Miller, Nood Fashion	Dalton	GA	USA
20	Emerald Carpet, Inc.		Dalton	GA	USA
21	Emery Park Carpet Company		Calhoun	GA	USA
22	Engineered Floors	Dream Weaver , Dwellings, Pentz	Calhoun	GA	USA
23	Fibreworks Corporation		Louisville	KY	USA
24	Forbo Flooring Systems	Flotex Carpet	Hazleton	PA	USA
25	Fortune Contract, Inc.		Dalton	GA	USA
26	Foss Manufacturing Co LLC		Hampton	NH	USA
27	Godfrey Hirst USA, Inc.		Adairsville	GA	USA
28	Hibernia Woolen Mills		Whittier	CA	USA
29	iCarpetiles.com., Inc.		Louisville	KY	USA
30	Indian Summer Carpet Mills, Inc.	Cherokee Carpet, Northstar Flooring Design, Southwind Carpet	Dalton	GA	USA
31	Interface Americas	FLOR	Atlanta	GA	USA
32	J Mish LLC		Cartersville	GA	USA
33	J&J Industries, Inc.	Templeton	Dalton	GA	USA
34	Joy Carpets & Co.		Fort Oglethorpe	GA	USA
35	Kaleen Rugs, Inc.		Dalton	GA	USA
36	Kane Carpet	Weavemasters	Brooklyn	NY	USA
37	Kinsley Carpet Mills		Dalton	GA	USA
38	Kraus	Barrett Carpet	Clarion	PA	USA
39	Lancer Enterprises, Inc.		Dalton	GA	USA
40	Langhorne Carpet Co Inc.		PENNDL	PA	USA

*List includes mills and subsidiaries based on reporting received through Q4 2016. This list does not reflect any changes, additions, or deletions effective as of Jan 2017. For the most up to date list, please visit: <http://www.calrecycle.ca.gov/Carpet/MfrBrands/default.htm>

41	Lexmark Carpet Mills, Inc.		Dalton	GA	USA
42	Lonesome Oak Trading Co., Inc.		Chatsworth	GA	USA
43	Manassas Textiles, Inc. DBA Carpet Bagger		Adairsville	GA	USA
44	Mannington Mills, Inc.	Mannington Commercial	Calhoun	GA	USA
45	Marquis Industries, Inc.	Artisans Carpet, Artisans Hospitality, Astro Carpet Mills, Best Buy Flooring Source, Best Buy Hard Surfaces, Cornerstone Hospitality, Dalton Carpet Depot, Omega Pattern Works	Chatsworth	GA	USA
46	Mathews & Parlo Carpet Wholesalers, Inc.		Calhoun	GA	USA
47	Merida Meridian Inc.		Boston	MA	USA
48	Millennium Carpet Mills Inc.	Atlas Ind., Creative Carpet, Orion Carpet	Chatsworth	GA	USA
49	Milliken & Company	Milliken Services LLC., Sylvan Chemical Co.	Spartanburg	SC	USA
50	Modulyss		Dalton	GA	USA
51	Mohawk Industries, Inc.	Aladdin, Aladdin Manufacturing Corporation, Bigelow, Color Center, CustomWeave, Durkan, Floorscapes, Floorz, Galaxy, Helios, Horizon, Horizon Europe, Karastan, Lees, Mohawk, Mohawk Carpet, Mohawk Carpet Distribution, Mohawk Carpet Foundation, Mohawk Carpet Transportation of Georgia, Mohawk Commercial, Mohawk ESV, Mohawk Factoring, Mohawk Industries, Mohawk Resources, Mohawk Servicing, Nautilus, Portico, Portico Estate, Properties by Mohawk, Regency Grand, Wayn-Tex LLC, World, Wunda Weve	Dalton	GA	USA
52	Nature's Carpet		Vancouver	British Columbia	Canada
53	Next Floor Inc.		Conestogo	Ontario	Canada
54	Nourison Industries Inc.	Div of Nourison, AeroSea, Nourison Home, Nourtex	Saddle Brook	NJ	USA
55	Phenix Flooring, LLC (Pharr Yarns, Dobbs M	Looptex Mills, Phenix	Dalton	GA	USA
56	Prestige Mills	Concepts International, Weavetuft Carpet	Long Island City	NY	USA
57	R.C. Willey Home Furnishings, Inc.		Salt Lake City	UT	USA
58	RADICI USA, INC		Spartanburg	SC	USA
59	Relative Space (Floorworks)		NY	NY	USA
60	Riviera Carpets		Calhoun	GA	USA
61	Royalty Carpet Mills, Inc.	Camelot Carpet Mills, Pacificrest Mills, Moda	Irvine	CA	USA
62	Savnik & Company, Inc.		Oakland	CA	USA
63	Shaheen Carpet Mills	Carpets by Sierra, Sierra Carpet Mills	Resaca	GA	USA
64	Shaw Industries, Inc.	American Home Fashions of California, Cabin Crafts, Couture Elegant Floors by Shaw, HGTV Home - Flooring by Shaw, Kathy Ireland Home Solutions, Patcraft, Philadelphia Commercial, Philadelphia Residential, Queen, Queen Commercial, Shaw, Shaw Contract Group, Shaw Home Foundations Flooring, Shaw Hospitality, ShawMark Home, Sutton Carpets, Tuftex	Dalton	GA	USA
65	Signature Hospitality Carpet LLC	Dalton Carpet Mart, Signature Accord	Dalton	GA	USA
66	Stanton Carpet Corporation	Antrim Carpets, Rosecore, Royal Dutch Carpets	Syosset	NY	USA
67	Stark Carpet Corp		New York	NY	USA
68	TaiPing Carpets Americas Inc.	Edward Field	Calhoun	GA	USA
69	Tandus Flooring Inc.	Tandus Flooring US LLC	Solon	OH	USA
70	The Dixie Group, Inc.	Dixie Home, Fabrica International, Masland Carpets and Rugs, Masland Contract, Whitespace, Atlas Carpet Mills	Mobile	AL	USA
71	The Miller Davis Group	Davis & Davis Rugs, Glen Eden Wool Carpets, Luzern LTD	Chattanooga	TN	USA
72	Totally Enterprises		Dalton	GA	USA
73	Ulster Carpet Mills (North America) Inc.		Marietta	GA	USA
74	Unique Carpets Ltd.		Riverside	CA	USA
75	Wellington		Fremont	CA	USA
76	Woolshire Carpet Mills Inc.		Calhoun	GA	USA

10.8 Reporting Sheets (Processors, Manufacturers, CSEs)

Tier-1 Processors Reporting Sheet

Processors Data Entry Form	
Company Name:	
Report Prepared by:	
Phone Number:	
Email Address:	
Date of Report:	
AB 2398 Monthly Reporting CONFIDENTIAL	Actual December 2016
California Jobs Information	
Number of CA FTEs at beginning of this month	
Number of FTE CA Jobs lost this month	
Number of FTE CA Jobs gained this month	
Total Number of CA FTEs at end of this month	-
Post-consumer carpet pounds directly collected or received by you for this month	
Post-consumer carpet pounds directly collected by you from California for this month	
Whole carpet from CA received from other collectors	
Total CA lbs.	-
Post-consumer carpet pounds directly collected by you from OUTSIDE California for this month	
TOTAL Post-consumer carpet pounds	-
Carpet PADDING	
Pounds of carpet PAD/CUSHION collected in CA by you	-
Carpet POUNDS directly collected by YOU from California by FIBER type [Do NOT report pounds you are purchasing from other collectors]	
Nylon 6	
Nylon 6,6	
Polypropylene	
PET	
Wool	
Other/Mixed Fibers	
TOTAL	-
CHECK: Row 30 must equal Row 16	-
Accounting for total PC Carpet Inputs & Beginning Inventory this month	
Beginning Inventory of Whole Carpet from CA at start of month (should equal prior month ending inventory)	
Whole Carpet Collected from California (equal to Total CA lbs. Row 18)	-
TOTAL CA CARPET AVAILABLE FOR PROCESSING	-
Accounting for total Whole Carpet Outputs & Ending Inventory	
Tile REUSE Carpet TILE Sold/Donated & Shipped for REUSE only	
Broadloom REUSE Whole Carpet Sold/Donated & Shipped for REUSE only	
COLLECTED and Internally Used BY YOU Whole Carpet this month from CA only	
RECEIVED from other collectors / sorters and Internally Used BY YOU Whole Carpet this month from CA only	
Whole Carpet shipped to US customers OUTSIDE California	
Whole Carpet shipped to customers outside the United States	
Whole Carpet shipped to customers INSIDE California	
Whole Carpet sent to WTE	
Whole Carpet sent to Incineration	
Whole Carpet sent to Landfill	
Ending Inventory of Whole Carpet	
TOTAL	-
CHECK: Row 48 must equal Row 35	-

Processing of Internally Used Whole Carpet	
Internally Used Whole Carpet from CA only (Rows 39 and 40)	-
All Processed Outputs (Type 1, Type 2, Calcium Carbonate, CAAF, and Cement Kiln)	
Processed Wastes sent to Landfill	
Processed Wastes sent to WTE	
Other Outlets	
Processed Wastes sent to Incineration	
TOTAL	-
<i>CHECK: Row 57 must equal Row 51</i>	
Output and other destinations of post-consumer carpet internally processed this month	
Beginning Inventory of Type 1 Outputs from prior month	
Processed Type 1 Output generated this month (Row 52-79-81-85)	-
TOTAL TYPE 1 MATERIAL PROCESSED	-
REUSE	
Tile REUSE Carpet Tile Sold & Shipped for REUSE only (Row 37)	-
Broadloom REUSE Whole Carpet Sold/Donated & Shipped for REUSE only (Row 38)	-
Type 1 Outputs (Sold and Shipped)	
TILE RECYCLED: Shredded Carpet tile used for tile backing	
Fiber	
DePoly or Chemical Component	
Total Type 1 Output (SOLD & SHIPPED)	-
Ending Inventory of Type 1 Outputs	
<i>CHECK: Rows 60+61-67-68-69-71 must equal zero</i>	
Ash Tests	
Number of Ash Tests run this month (min 1 per 1M pounds)	
Average Ash Test Results over month for Type 1 pounds	
Type 2 Outputs (Sold & Shipped)	
Filler	
Carcass Sold	
Total Type 2 Output (SOLD & SHIPPED) as Counted by CalRecycle	-
Calcium Carbonate	
Pounds of Calcium Carbonate sold & shipped as a RAW MATERIAL	
Other Diversion	
CAAF	
Cement Kiln feedstock	
Total Other Diversion	-
TOTALS	
Total Ending Inventory of All Processed Output (Type 1, Type 2, Calcium Carbonate, and Other)	
TOTAL Recycled Output As Counted by CalRecycle (lbs)	-
Calculations for funding	
Whole Carpet collected by you Shipped/Sold for recycling (\$0.02)	\$ -
Tile REUSE Only (\$0.10)	\$ -
Broadloom REUSE Only (\$0.10)	\$ -
Tile RECYCLED: Shredded Carpet tile used for tile backing (\$0.10)	\$ -
Fiber and DePoly Type 1 Output (\$0.10)	\$ -
Type 2 Output (excluded CAAF and Kiln) (\$0.03)	\$ -
Calcium Carbonate as Raw Material (\$0.17)	\$ -
CAAF (Separate Payment Calculation) (\$0.03)	\$ -
Cement Kiln feedstock (Separate Payment Calculation) (\$0.03)	\$ -
Total Requested \$s (Tile Reuse + Tile Recycle + Type 1 + Type 2 + CC + Other Diversion)	\$ -

Tier-2 Manufacturers Reporting Sheet

Manufacturers Data Entry Form	
Company Name:	
Report Prepared by:	
Phone Number:	
Email Address:	
Date of Report:	
AB 2398 Monthly Reporting & Forecast CONFIDENTIAL	Actual December 2016
If located in CA, number of Full Time Equivalents (FTEs) working on PCC Products	
Number of CA FTEs at beginning of this month	
Number of FTE CA Jobs lost this month	
Number of FTE CA Jobs gained this month	
Total Number of CA FTEs at end of this month	-
Type 1, Non-Nylon PC Carpet pounds purchased by you in this month	
Type 1 pounds directly purchased by you from a QUALIFIED Processor of CA Waste Carpet each month	
Type 1, Non-Nylon Processed CA PC Carpet pounds directly purchased by YOU by FIBER type	
Polypropylene	
PET	
Other including mixed non-nylon fibers	
TOTAL	-
CHECK: Row 21 must equal Row 16	
Accounting for total processed Type 1 PC Carpet Inputs & Beginning Inventory this month	
Beginning Inventory of Type 1 Non-Nylon processed PC Carpet from CA at start of month (should equal prior month ending inventory)	
Type 1 Non-Nylon Processed PC Carpet received/purchased (Row 16)	-
TOTAL Material Available for Current Month	-
Accounting for total PC Carpet Outputs & Ending Inventory	
Type 1 Non-Nylon Processed PC Carpet SOLD & SHIPPED this month [SEE NOTE 1]	
Type 1 Non-Nylon (waste) sent to WTE	
Type 1 Non-Nylon (waste) sent to Landfill	
Type 1 Non-Nylon (waste) sent to Incineration	
Ending Inventory of Type 1 Non-Nylon processed PC Carpet from CA	
TOTAL	-
CHECK: Row 33 must equal Row 26	
Calculations for funding	
Total Requested (\$) Non-Nylon (\$0.25)	\$ -
Output and other destinations of Non-Nylon Type 1 materials internally processed this month	
Non-Nylon Products SOLD & SHIPPED in month	# LBS Sold/Shipped
Name of End Product (Specify Product)	[# LBS]
Name of End Product (Specify Product)	[# LBS]
Name of End Product (Specify Product)	[# LBS]
Name of End Product (Specify Product)	[# LBS]
Name of End Product (Specify Product)	[# LBS]
CHECK: Rows 39+40+41+42+43 must equal Row 28	

Source of Type 1, Non-Nylon Processed CA PC Carpet pounds directly purchased by YOU		
PLEASE LIST ALL SOURCES OF FIBER PURCHASES BY COMPANY	# LBS Purchased	Location/Contact Information for Purchasing Party
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]

ATTESTATION	
Have you submitted the attestation form?	

Submission of this data reaffirms my agreement to maintain good standing with CARE: I attest to the truthfulness of this data, I will allow on-site review by CARE and its accounting representatives for verification, and I acknowledge I am not in violation of any local or state environmental regulations.

NOTE 1: This is pounds of Type 1 PCC contained in your final product. It is NOT the total product weight; only that of the Type 1 content.

For Office Use Only	
VERSION # and DATE CREATED:	v1 1/3/17
Date Filed:	
Signoff:	

CSEs Reporting Sheets

CSE Data Entry Form	
Company Name:	
Report Prepared by:	
Phone Number:	
Email Address:	
Date of Report:	
AB 2398 Monthly Reporting CONFIDENTIAL	Actual December 2016
California Jobs Information	
Number of CA FTEs at beginning of this month	
Number of FTE CA Jobs lost this month	
Number of FTE CA Jobs gained this month	
TOTAL Number of CA FTEs at end of this month	-
Accounting of Beginning Inventory this month	
Starting Inventory - Whole Carpet	
Starting Inventory - Carpet Tiles For REUSE or Recycling	
Starting Inventory - Pounds of carpet PAD/CUSHION	
TOTAL Starting Inventory	-
Accounting for total PC Carpet Inputs & Beginning Inventory this month	
Post-consumer carpet pounds directly collected by you from California for this month	-
Nylon 6	
Nylon 6,6	
Polypropylene	
PET	
Wool	
Other/Mixed Fibers	
Carpet Tile	
Carpet PADDING	
Pounds of carpet PAD/CUSHION collected by you	
TOTAL Carpet + Padding	-
Accounting for total PC Carpet Outputs & Ending Inventory	
CARPET TILE REUSE: Carpet Tile Shipped and Sold/Donated for Reuse	
Broadloom REUSE Whole Carpet Sold/Donated & Shipped for REUSE only	
Carpet tile shipped and sold for recycling	
Whole carpet shipped to US customers OUTSIDE California	
Whole carpet shipped to customers outside the United States	
Whole carpet shipped to customers INSIDE California	
Non-carpet materials with value (i.e. carpet cushion) - Shipped for Recycling	
Ending Inventory - Whole Carpet	
Ending Inventory - Carpet Tile	
Ending Inventory - Pounds of carpet PAD/CUSHION	
TOTAL	-
TOTAL Carpet	-
Output and other destinations of post-consumer carpet internally processed this month	
CAAF	
Cement Kiln feedstock	
Carcass Sold	
Landfilled	
WTE	
Incinerated	
TOTAL	-
Mass Balance (should equal 0)	
Starting + Collections In - Collections Out - Other End Use	-
Calculations for funding	
CSE Reporting Incentive	\$ -
Carpet Tile REUSE: Carpet Tile Shipped and Sold/Donated for Reuse (\$0.10)	\$ -
Broadloom REUSE Only (\$0.10)	\$ -
Whole Carpet Shipped and Sold for recycling (\$0.02)	\$ -
TOTAL Requested	\$ -

STRICTLY CONFIDENTIAL SHIPMENT SALE/DONATION DETAIL FOR CARE/ACCOUNTING FIRM ONLY		
LIST ALL PARTIES RECEIVING SOLD/DONATED CARPET TILE FOR REUSE (greater than or equal to 500 pounds)		
Company/Individual Receiving Carpet Tiles for REUSE	# LBS Sold/Donated	Location/Contact Information for Receiving Party
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]

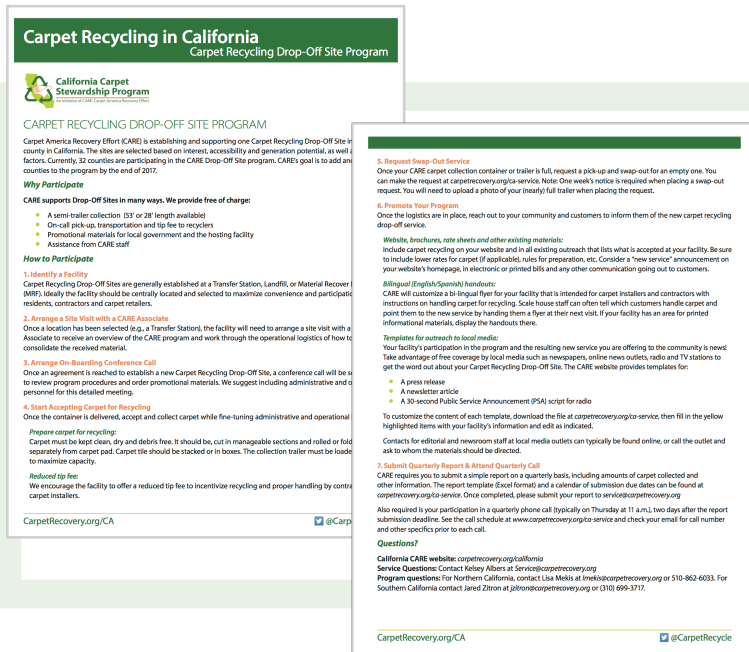
STRICTLY CONFIDENTIAL SHIPMENT SALE/DONATION DETAIL FOR CARE/ACCOUNTING FIRM ONLY		
LIST ALL PARTIES RECEIVING SOLD/DONATED BROADLOOM FOR REUSE (greater than or equal to 500 pounds)		
Company/Individual Receiving Broadloom for REUSE	# LBS Sold/Donated	Location/Contact Information for Receiving Party
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]

STRICTLY CONFIDENTIAL SHIPMENT SALE/DONATION DETAIL FOR CARE/ACCOUNTING FIRM ONLY		
LIST ALL PARTIES RECEIVING SOLD/SHIPPED WHOLE CARPET (greater than or equal to 500 pounds)		
Company/Individual Receiving Whole Carpet	# LBS Sold/Shipped	Location/Contact Information for Receiving Party
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]
[insert]	[# LBS]	[insert]

Submission of this data reaffirms my agreement to maintain good standing with CARE: I attest to the truthfulness of this data, I will allow review by CARE and its accounting representatives for verification, and I acknowledge I am not in violation of any local or state environmental regulations.

For Office Use Only	
VERSION # and DATE CREATED:	v1 1/3/2017
Date Filed:	
Signoff:	

10.9 Samples of Education and Outreach



Drop-off Site Program Steps Flyer

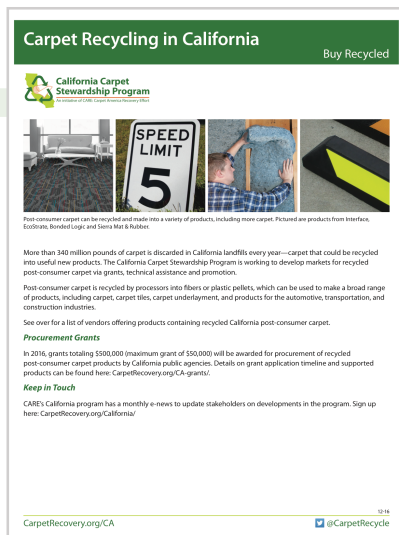
Distributed to all new drop-off sites



How to Load a Container Flyer

Developed in Q4 2016

Distributed to new drop-off sites



Buy Recycled Flyer

Distributed to local government



Point-of-Sale Sign

Made available to California retailers through website and E-news



Custom Bilingual Flyer

1,400 distributed to installers and retailers

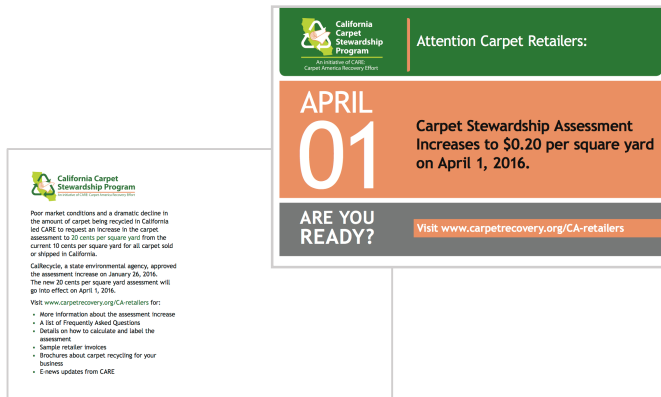


Brochure

Over 36,000 distributed to retailers for consumers

Retailer Assessment Increase Postcard

Distributed to all known California retailers for April 2016 and January 2017 assessment changes



Products with Recycled Post-Consumer Carpet Available from California Companies

Posted on September 14, 2016

A variety of products using recycled California post-consumer carpet as feedstock are now available from four in-state companies: **EcoStrate** (signage), **Reliance Carpet Cushion**, **SafePath** (ramps, walkway systems) and **Sierra Mat & Rubber** (wheel stops, pavers, mats.)

These companies are listed on key databases maintained by CalRecycle to encourage the acquisition of products containing recycled-material content:

The **Recycled-Content Product Manufacturers (RCPM)** directory showcases innovative recycled-content products made by California manufacturers who use recycled waste as a feedstock.

Recycle Store lists manufacturers who use California waste as a feedstock, and are located within a Recycling Market Development Zone (RMDZ).

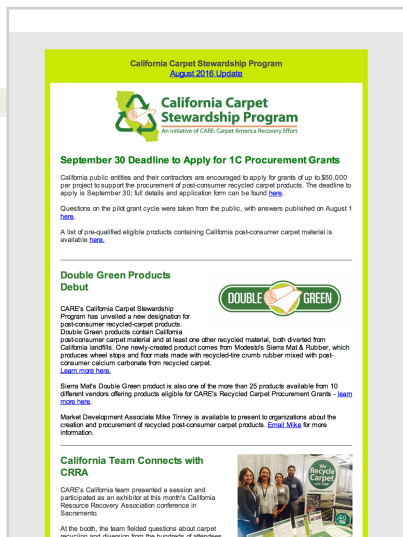
CARE offers grants to support the procurement of post-consumer carpet products by California public entities and their contractors. The deadline to apply is September 30 – learn more [here](#).

Additional products using California post-consumer carpet are also available. For more information on products containing post-consumer carpet, see the [CARE website](#).

Sample Blog Post

Regular blog posts on CARE website

Highlights program events, updates, resources, and achievements



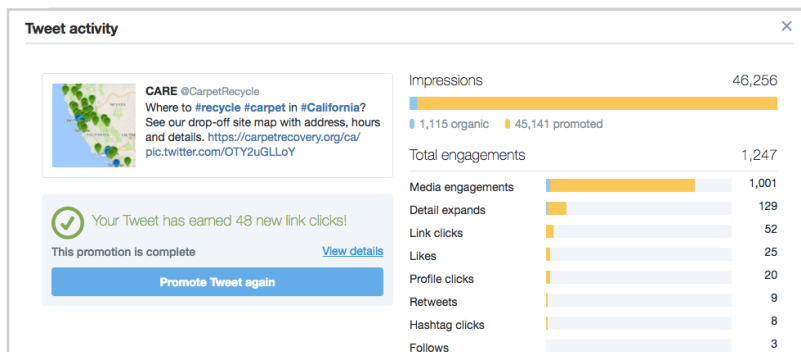
E-news

Monthly updates
distributed to
stakeholders



Carpet Recycling Fast Facts for Installers Video

Video created for
carpet installers to
increase awareness
about carpet recycling



Promoted Tweet (@CarpetRecycle)

Promoted tweet to raise awareness of drop-off site map in California

10.10 Audited Financial Statements

- a. CARE Audited Financial Statement
- b. AB 2398 California Carpet Stewardship Program 2016 Audited Financial Statement
- c. CARE Performance Audit 2016



FINANCIAL STATEMENTS

DECEMBER 31, 2016 AND 2015

CARPET AMERICA RECOVERY EFFORT, INC.

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INDEPENDENT AUDITOR'S REPORT

Board of Directors
Carpet America Recovery Effort, Inc.
100 South Hamilton Street
Dalton, Georgia 30720

We have audited the accompanying financial statements of Carpet America Recovery Effort, Inc., which comprise the statement of financial position as of December 31, 2016, and the related statements of activities and cash flows for the year then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Atlanta | Calhoun | Canton | Dalton | Dublin
Kennesaw | Marietta | Rome | Warner Robins

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Carpet America Recovery Effort, Inc. as of December 31, 2016, and the changes in net assets and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter

The financial statements of Carpet America Recovery Effort, Inc. for the fiscal year ended December 31, 2015 were audited by another auditor who expressed an unmodified opinion on those statements on June 23, 2016.

Nichols, Cauley + Associates, LLC

Dalton, Georgia
June 16, 2017

CARPET AMERICA RECOVERY EFFORT, INC.
STATEMENTS OF FINANCIAL POSITION
YEARS ENDED DECEMBER 31, 2016 AND 2015

	ASSETS	
	2016	2015
CURRENT ASSETS		
Cash and cash equivalents	\$ 661,117	\$ 556,288
VPS restricted cash	-	386,469
Accounts receivable, net	12,440	26,050
Due from related parties	74,943	43,499
Prepaid expenses	10,928	10,651
Total current assets	<u>759,428</u>	<u>1,022,957</u>
PROPERTY AND EQUIPMENT		
Computer equipment	26,302	16,990
Less accumulated depreciation	<u>(18,542)</u>	<u>(16,727)</u>
Property and equipment, net	<u>7,760</u>	<u>263</u>
 TOTAL ASSETS	 <u>\$ 767,188</u>	 <u>\$ 1,023,220</u>
	LIABILITIES	
CURRENT LIABILITIES		
Accounts payable	\$ 10,347	\$ 47,058
Due to VPS program	-	386,469
Accrued expenses	57,766	35,700
Deferred revenue	<u>20,000</u>	<u>5,500</u>
Total current liabilities	<u>88,113</u>	<u>474,727</u>
 TOTAL LIABILITIES	 <u>88,113</u>	 <u>474,727</u>
	NET ASSETS	
Unrestricted net assets	<u>679,075</u>	<u>548,493</u>
 TOTAL NET ASSETS	 <u>679,075</u>	 <u>548,493</u>
 TOTAL LIABILITIES AND NET ASSETS	 <u>\$ 767,188</u>	 <u>\$ 1,023,220</u>

See accompanying notes and independent auditor's report

CARPET AMERICA RECOVERY EFFORT, INC.
STATEMENTS OF ACTIVITIES
YEARS ENDED DECEMBER 31, 2016 AND 2015

	2016	2015
REVENUE		
CARE dues	\$ 372,186	\$ 381,208
CARE conferences	89,412	106,963
Contributions in-kind of CRI	188,789	98,412
Interest income	1,675	1,799
Total revenue	<u>652,062</u>	<u>588,382</u>
EXPENSES		
Program services		
Member programs	<u>403,816</u>	<u>371,604</u>
Total program services	<u>403,816</u>	<u>371,604</u>
Support services		
Administrative	71,278	100,508
Facilities	<u>46,386</u>	<u>17,966</u>
Total support services	<u>117,664</u>	<u>118,474</u>
Total expenses	<u>521,480</u>	<u>490,078</u>
INCREASE IN UNRESTRICTED NET ASSETS	<u>130,582</u>	<u>98,304</u>
UNRESTRICTED NET ASSETS -beginning of year	<u>548,493</u>	<u>450,189</u>
UNRESTRICTED NET ASSETS -end of year	<u><u>\$ 679,075</u></u>	<u><u>\$ 548,493</u></u>

See accompanying notes and independent auditor's report

CARPET AMERICA RECOVERY EFFORT, INC.
STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2016 AND 2015

	<u>2016</u>	<u>2015</u>
CASH FLOWS FROM OPERATING ACTIVITIES		
Change in unrestricted net assets	\$ 130,582	\$ 98,304
Adjustments to reconcile change in net assets to net cash provided by operating activities:		
Depreciation	1,815	1,550
Changes in operating assets and liabilities:		
VPS restricted cash	386,469	(386,469)
Net accounts receivable	13,610	39,150
Due from related parties	(31,444)	27,268
Prepaid expense	(277)	3,778
Accounts payable	(36,711)	36,557
Due to VPS program	(386,469)	386,469
Accrued liabilities	22,066	29,962
Deferred revenue	14,500	5,500
Cash provided by operating activities	<u>114,141</u>	<u>242,069</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Property and equipment additions	<u>(9,312)</u>	<u>-</u>
Net cash used in investing activities	<u>(9,312)</u>	<u>-</u>
Net increase in cash and cash equivalents	104,829	242,069
Cash and cash equivalents at beginning of year	<u>556,288</u>	<u>314,219</u>
Cash and cash equivalents at end of year	<u><u>\$ 661,117</u></u>	<u><u>\$ 556,288</u></u>

See accompanying notes and independent auditor's report

CARPET AMERICA RECOVERY EFFORT, INC.
NOTES TO THE FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2016 AND 2015

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America.

The financial statements are prepared under the requirements of ASC Topic 958-205-05. The topic requires Carpet America Recovery Effort, Inc. (CARE) to recognize any contributions as support in the period received or when an unconditional pledge has been made. In addition, contributed services using specialized skills that would have been required to be purchased, if not provided by donation, are also recognized in the period performed.

CARE is required to report information regarding its financial position and activities according to three classes of assets: unrestricted, temporarily restricted, and permanently restricted. As of December 31, 2016 and 2015, CARE had no temporarily restricted or permanently restricted net assets.

The following is a description of the more significant policies that the Company follows in preparing and presenting its financial statements.

Reporting Entity and Nature of Operations

The Carpet America Recovery Effort, Inc. (known by the trade name “CARE”) is a non-profit organization that was formed to encourage and oversee market based solutions for the recycling of post-consumer carpet.

Interested parties can join CARE as members by paying dues. Membership allows participation in the Organization’s programs.

To achieve its goals, CARE sponsors events and conferences that bring together stakeholders in the carpet recycling industry. CARE also produces educational programs to help the public understand carpet recycling. A major part of its educational program is the Organization’s website, www.carpetrecovery.org.

CARE is also the “Carpet Stewardship Organization” (CSO) under California AB2398 whereby it administers the Organization’s “Carpet Stewardship Plan” (the Plan). As the CSO, CARE acts as a fiduciary of funds collected from the sale of carpeting in California through the carpet stewardship assessment and administers disbursements in accordance with the Plan. Similar legislation has been proposed in other states.

CARE is the stewardship organization for the Carpet and Rug Institute, Inc.’s (CRI) Voluntary U.S. Product Stewardship Program for Post-Consumer Carpet (VPS) Program. VPS is a voluntary, nationwide program to support the carpet sorting network for diversion of post-consumer carpet from landfills. As the steward, CARE acts as a fiduciary of CRI’s grant funds and administers disbursements in accordance with the Program guidelines.

CARPET AMERICA RECOVERY EFFORT, INC.
NOTES TO THE FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2016 AND 2015

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates in the Presentation of Financial Statements

The preparation of financial statements in conformity with generally accepted accounting principles in the U.S. requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

CARE considers all money market accounts and highly liquid debt instruments with maturities that do not exceed ninety days to be cash equivalents for financial statement purposes. The amounts that exceed federally insured limits are secured by investment portfolio securities of the bank.

Property and Equipment

Depreciation is computed using the straight-line method over the estimated useful lives of the assets. The useful life for computer equipment is three years.

Revenue Recognition

Revenue from membership dues is recognized over the course of the membership period. Revenues from events are recognized at the time of the event.

Functional Allocation of Expenses

Expenses are charged directly to programs and supporting activities as incurred and have been summarized on a functional basis. Administrative expenses include those expenses that are not directly identifiable with any other specific function but provide for overall administration of the Organization.

2. VPS RESTRICTED CASH

CARE, as the stewardship organization of the VPS program, held VPS funds in CARE's bank account during 2015 as trustees since the VPS program did not have its own bank account. In 2016 the VPS program began holding funds in its own separate bank account.

CARPET AMERICA RECOVERY EFFORT, INC.
NOTES TO THE FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2016 AND 2015

3. ACCOUNTS RECEIVABLE

Accounts receivable consist of dues owed from members as of December 31, 2016 and 2015. Management has evaluated historical trends and individual account collectability and determined that an allowance for doubtful accounts was not necessary as of December 31, 2016 and 2015.

Due from related parties

CARE is reimbursed for costs it incurs from Carpet and Rug Institute, Inc. (CRI) for administration of the Voluntary Sponsorship Program (VPS). CARE is also reimbursed for costs it incurs as the Carpet Stewardship Organization under California AB2398 Carpet Stewardship Plan. Due from related parties consists of amounts due to CARE from CRI and AB2398 as of December 31, 2016 and 2015. On December 31, 2016 and 2015, the amount due to CARE from CRI for costs associated with administration of VPS was \$7,095 and \$0, respectively. On December 31, 2016 and 2015, the amount due to CARE for costs incurred as the Carpet Stewardship Organization under California AB2398 Carpet Stewardship Plan was \$67,848 and \$43,499, respectively.

4. ACCRUED EXPENSES

Accrued expenses consist of accounting expenses incurred and amounts due to employees but not yet paid.

5. INCOME TAX STATUS

The Organization is currently exempt from income taxes under Section 501(c)(3) of the Internal Revenue Code. The exemption does not apply to activity unrelated to the tax exempt function of the Organization. CARE did not have any unrelated business income for the year ended December 31, 2016 and 2015.

6. ACCOUNTING FOR UNCERTAINTY IN INCOME TAXES

CARE has adopted ASC Topic 740-10 which prescribes measurement and disclosure requirements for current and deferred income tax provisions. The topic provides for a consistent approach in identifying and reporting uncertain tax provisions. It is management's belief that CARE does not hold any uncertain tax positions as of December 31, 2016 and 2015. CARE's returns are subject to examination by the IRS generally for three years following the date filed. With few exceptions, the Organization is no longer subject to tax examination for years prior to 2012.

7. RELATED PARTIES; INDUSTRY AFFILIATE

The primary organizer of CARE was the Carpet and Rug Institute, Inc. (known by the trade name "CRI"). CRI is a 501(c)(6) organization under the Internal Revenue Code and one of the primary trade groups of the carpet industry.

CARPET AMERICA RECOVERY EFFORT, INC.
NOTES TO THE FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2016 AND 2015

7. RELATED PARTIES; INDUSTRY AFFILIATE (continued)

CRI initiated CARE's organization as the entity to represent and to promote the industry's carpet recycling efforts and to manage the industry's recycling programs.

CRI acts as an advocate of the carpet industry and actively works to represent its interest in legislative, regulatory, and judicial issues at the federal, state, and local levels. CRI played an active role in the development of the AB2398 legislation in California, and actively lobbies for the carpet industry in other states considering similar product stewardship or extended producer responsibility (commonly referred to as EPR) legislation.

CRI shares common directors and facilities and also provides administrative and technical support to CARE. CARE recognizes this support as in-kind contributions. The amount of this support totaled \$188,789 for the year ended December 31, 2016 and \$98,412 for the year ended December 31, 2015.

Under AB2398, CARE is allowed to be reimbursed for costs it incurs administering its Carpet Stewardship Plan. Costs incurred directly by the Plan are paid from AB2398 funds. Shared labor costs of AB2398 and CARE are systematically allocated and periodically settled. The plan reimbursed CARE a total of \$469,970 for the year ended December 31, 2016 and \$234,190 for the year ended December 31, 2015.

To participate in CARE's AB2398 California Carpet Stewardship Plan, membership in CARE is required.

Under the VPS program, CARE is allowed to be reimbursed for costs it incurs administering the program. Costs incurred directly by the program are paid from VPS funds. Shared labor costs of VPS and CARE are systematically allocated and periodically settled. VPS reimbursed CARE a total of \$65,413 for the year ended December 31, 2016 and \$61,364 for the year ended December 31, 2015. Membership in CARE is required to participate in the VPS program.

8. CONCENTRATIONS

CARE holds all of its cash at one bank. The amounts that exceed federally insured limits are secured by investment portfolio securities of the bank. Management believes that there is no significant concentration of credit risk.

Approximately 54% of dues were received from ten members in 2016 and 49% in 2015.

9. SUBSEQUENT EVENTS

In March of 2017, CARE received legal notice from CalRecycle regarding noncompliance findings regarding AB2398 for 2013, 2014, and 2015 outlining potential fines of \$3,350,000. Further, CalRecycle recommended rejection of the revised 2017-2021 Plan. Their analysis suggested all

CARPET AMERICA RECOVERY EFFORT, INC.
NOTES TO THE FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2016 AND 2015

9. SUBSEQUENT EVENTS (continued)

mills, retailers, and distributors would be operating without any approved Plan and therefore subject to a penalty of \$10,000 per day. CARE anticipates that an administrative law judge will hear the issue later this year.

Further, in April of 2017 CalRecycle rejected CARE's revised February 2017 California Carpet Stewardship 5-Year Plan for 2017-2021. During the May 16th hearing, the Director of CalRecycle reviewed a draft enforcement plan and announced the following path forward. CARE, and anyone else interested, will have until October 19, 2017 to submit a new plan for consideration. Upon submission, CalRecycle will have a 60-day public comment period rendering their decision on any new Plan at the December public hearing. The draft enforcement action further articulates that there will be no retroactive fines and future fines will be directed to manufacturers and not retailers or distributors. Manufacturers have until August 15, 2017 to declare in writing to CalRecycle one of three options: 1) stick with CARE, 2) go with another stewardship Organization, or 3) write their own plan. Thus, CARE expects the currently expired Plan will remain in effect until late 2017.

In July 2017, the Board committed \$150,000, \$50,000 per year for the next three years, to support North Carolina State University's Nonwovens Institute to research processes that could utilize PET.

Management has evaluated events through June 16, 2017, the date on which the financial statements were available to be issued.



California Carpet Stewardship Program

An initiative of CARE: Carpet America Recovery Effort

FINANCIAL STATEMENTS

DECEMBER 31, 2016 AND 2015

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN

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INDEPENDENT AUDITOR'S REPORT

Board of Directors

The AB2398 California Carpet Stewardship Plan

We have audited the accompanying financial statements of The AB2398 California Carpet Stewardship Plan, which comprise the statement of financial position as of December 31, 2016, and the related statements of activities and cash flows for the year then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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Kennesaw | Marietta | Rome | Warner Robins

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of The AB2398 California Carpet Stewardship Plan as of December 31, 2016, and the changes in net assets and cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter

The financial statements of The AB2398 California Carpet Stewardship Plan for the fiscal year ended December 31, 2015 were audited by another auditor who expressed an unmodified opinion on those statements on June 23, 2016.

Other Reporting Required by Government Auditing Standards

In accordance with Government Auditing Standards, we have also issued our report dated June 16, 2017, on our consideration of the Carpet America Recovery Efforts, Inc.'s internal control over the AB2398 California Carpet Stewardship Plan's financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the Carpet America Recovery Effort, Inc.'s internal control over the AB2398 California Carpet Stewardship Plan's financial reporting and compliance.

Nichols, Cauley + Associates, LLC

Dalton, Georgia
June 16, 2017

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
STATEMENTS OF FINANCIAL POSITION
YEARS ENDED DECEMBER 31, 2016 AND 2015

ASSETS

	<u>2016</u>	<u>2015</u>
CURRENT ASSETS		
Cash and cash equivalents	\$ 3,838,586	\$ 3,429,819
Assessments receivable	<u>4,404,041</u>	<u>2,286,293</u>
Total current assets	<u>8,242,627</u>	<u>5,716,112</u>
 TOTAL ASSETS	 <u>8,242,627</u>	 <u>5,716,112</u>

LIABILITIES

CURRENT LIABILITIES		
Due to recyclers	\$ 1,590,366	\$ 1,540,824
Due to CalRecycle	180,425	-
Due to CARE	67,848	43,499
University grant payable	17,033	48,647
Accounts payable	<u>190,676</u>	<u>202,100</u>
Total current liabilities	<u>2,046,348</u>	<u>1,835,070</u>
 TOTAL LIABILITIES	 <u>2,046,348</u>	 <u>1,835,070</u>

NET ASSETS

Unrestricted net assets	<u>6,196,279</u>	<u>3,881,042</u>
 TOTAL NET ASSETS	 <u>6,196,279</u>	 <u>3,881,042</u>
 TOTAL LIABILITIES AND NET ASSETS	 <u>\$ 8,242,627</u>	 <u>\$ 5,716,112</u>

See accompanying notes and independent auditor's report

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
STATEMENTS OF ACTIVITIES
YEARS ENDED DECEMBER 31, 2016 AND 2015

	2016	2015
REVENUE		
Carpet recovery assessments	\$ 16,677,081	\$ 8,614,707
Interest income	5,019	16,294
Total revenue	<u>16,682,100</u>	<u>8,631,001</u>
EXPENSES		
Recycler disbursements	10,061,168	6,358,325
Accounting fees	291,759	173,322
CalRecycle administrative fees	506,563	402,037
Personnel	469,970	234,190
Rural county program (collection program)	613,728	441,376
Consulting fees	540,723	257,151
Travel	78,664	40,801
Facilities	22,311	13,495
Marketing, education and outreach	680,177	226,900
Testing fees	18,348	20,014
CA manager	190,654	130,752
University grant	187,507	196,271
Capacity expansion grants	601,000	-
Product development grants	64,257	-
California council	31,548	-
Insurance	2,045	1,848
Other	6,441	4,956
Total expenses	<u>14,366,863</u>	<u>8,501,438</u>
INCREASE IN UNRESTRICTED NET ASSETS	<u>2,315,237</u>	<u>129,563</u>
UNRESTRICTED NET ASSETS -beginning of year	<u>3,881,042</u>	<u>3,751,479</u>
UNRESTRICTED NET ASSETS -end of year	<u>\$ 6,196,279</u>	<u>\$ 3,881,042</u>

See accompanying notes and independent auditor's report

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
STATEMENTS OF CASH FLOWS
YEARS ENDED DECEMBER 31, 2016 AND 2015

	<u>2016</u>	<u>2015</u>
CASH FLOWS FROM OPERATING ACTIVITIES		
Change in unrestricted net assets	\$ 2,315,237	\$ 129,563
Adjustments to reconcile change in net assets to net cash provided by operating activities:		
Changes in operating assets and liabilities:		
Net accounts receivable	(2,117,748)	(1,108,212)
Due to recyclers	49,542	420,984
Due to CalRecycle	180,425	(42,946)
Due to CARE	24,349	(27,268)
University grant payable	(31,614)	48,647
Accounts payable	<u>(11,424)</u>	<u>148,955</u>
Net increase/(decrease) in cash and cash equivalents	408,767	(430,277)
Cash and cash equivalents at beginning of year	<u>3,429,819</u>	<u>3,860,096</u>
Cash and cash equivalents at end of year	<u>\$ 3,838,586</u>	<u>\$ 3,429,819</u>

See accompanying notes and independent auditor's report

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
NOTES TO THE FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2016 AND 2015

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

The financial statements have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America.

The Plan is required to report information regarding its financial position and activities according to three classes of assets: unrestricted, temporarily restricted, and permanently restricted. As of December 31, 2016 and 2015 the Plan had no temporarily restricted or permanently restricted net assets.

The following is a description of the more significant policies that the Company follows in preparing and presenting its financial statements.

Reporting Entity and Nature of Operations

The AB2398 California Carpet Stewardship Plan (the Plan) is authorized by California Assembly Bill (AB2398) to implement measures to achieve measurable improvements in the landfill diversion and recycling of postconsumer carpet. AB2398 was signed into law by the governor of California on September 30, 2010. Subsequent regulations were approved and are found in Title 14, Division 7, Chapter 11. The Plan began operations on July 1, 2011 and is managed by the Carpet America Recovery Effort, Inc. (CARE).

The Plan is a set of guidelines that CARE uses to administer AB2398. The Plan was developed by CARE and an initial plan document was conditionally approved by the California Department of Resources Recycling and Recovery (CalRecycle). A revised stewardship plan document (version 3.2.2) was approved by CalRecycle on January 21, 2014 and Plan Amendments on January 5, 2015 (Addendum #1), October 21, 2015 (Addendum #2), and January 26, 2016 (Addendum #3). Periodic changes are made to the Plan and changes are approved by CalRecycle. These four documents collectively comprise the current Plan.

A new 5-Year Plan for 2017 to 2021 was submitted to CalRecycle by CARE as the Stewardship Organization on October 2016. The Plan was rejected by CalRecycle on December 20, 2016 as documented in the Request for Approval (RFA) and incorporated by reference. As a result, CARE rewrote the new Plan considering the 7 Findings of the RFA. The revised new Plan was resubmitted to CalRecycle in February 2017. CalRecycle once again rejected the revised Plan at a April 18, 2017 hearing. At that time the Director of CalRecycle directed the Enforcement arm to draft an Enforcement Plan for review at the May meeting and possible implementation on or after June 20, 2017. The currently expired Plan was extended while CARE or any other organization prepares to submit another Plan. In the draft Enforcement Plan CARE now has until October 19th to resubmit a Plan. The currently expired Plan will continue to operate under CARE administration while this

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
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YEARS ENDED DECEMBER 31, 2016 AND 2015

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

process takes place. The draft Enforcement Plan further articulates that there will be no retroactive fines and future fines will be directed to manufacturers and not retailers or distributors. Manufacturers have until August 15, 2017 to declare in writing to CalRecycle one of three options: 1) stick with CARE, 2) go with another Stewardship Organization, or 3) write their own plan.

As part of the draft Enforcement Plan, CalRecycle sent a letter to all registered manufacturers informing them of the status and of a workshop to be held on May 16, 2017. That workshop/webinar was held on May 16, 2017 to inform stakeholders how to write a Plan.

AB2398 requires manufacturers or retailers to collect an assessment based on the square yardage of carpeting sold in California. CARE mill members participating under the Plan collect the funds from the California retailers. Mills (manufacturers) submit funds directly to CARE quarterly based on reported yards sold in the prior quarter. CARE disburses the proceeds in accordance with the Plan.

Disbursements are to promote carpet recycling in California and cover the costs of administering the Plan. The primary use of funds is to carpet recyclers who are paid by the pound of qualifying products that are processed and subsequently sold.

Manufacturers or retailers participate voluntarily in the Plan; however, AB2398 requires that they participate in CARE's Plan, or develop and implement their own Carpet Stewardship Plan.

CARE was the sole carpet stewardship organization until April 1, 2015. At that time other organizations could apply for status as a "Carpet Stewardship Organizations". As of June 16, 2017, no other Carpet Stewardship Organizations have submitted a Plan or are approved. CARE's current plan was approved until December 31, 2016 and has been extended. Given the new date for submission of a new Plan (October 19, 2017) and the 60-day review period for CalRecycle, the current Plan will be operation through late December 2017.

CARE is aware that 2 or possibly 3 other organizations are considering the submission of a Plan. Under the current law, any new Plan must be developed or endorsed by a manufacturer.

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
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1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

CARE does not have the authority to levy penalties on Manufacturers or Retailers that are not compliant with AB2398. That authority belongs solely to the state of California.

Use of Estimates in the Presentation of Financial Statements

The preparation of financial statements in conformity with generally accepted accounting principles in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Plan considers all money market accounts and highly liquid debt instruments with maturities that do not exceed ninety days to be cash equivalents for financial statement purposes. The amounts that exceed federally insured limits are secured by investment portfolio securities of the bank.

Revenue Recognition

Revenue from carpet stewardship assessments is recognized during the calendar quarter the carpeting is sold by a manufacturer that is a participant in the Plan. Manufacturers report their sales on a quarterly basis. Reports and payments were due within 30 days following the close of each quarter. The assessment for the year ended December 31, 2015 was \$0.05 per square yard until April 1, 2015 which increased the assessment to \$0.10 per square yard of carpeting sold in California. For 2016, the assessment was \$0.10 per square yard until the April 1, 2016 increase to \$0.20 per square yard. On January 1, 2017, the assessment was increased to \$0.25 per square yard.

The carpet stewardship assessment is added to the wholesale price of carpet, and it is passed through until it reaches the retail consumer.

Functional Allocation of Expenses

Expenses are charged directly to programs and supporting activities as incurred and have been summarized on a functional basis. Administrative expenses include those expenses that are not directly identifiable with any other specific function but provide for overall administration of the plan.

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
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2. ASSESSMENTS RECEIVABLE

Assessments receivable consist of carpet recovery assessments due from plan participants. As of December 31, 2016 and 2015, management is of the opinion that all assessments are collectible.

3. ACCRUED EXPENSES

The Plan is responsible for reimbursing CalRecycle's costs to administer the Plan. Pursuant to AB2398 Section 42977(d), the total amount payable to CalRecycle is up to 5% of the carpet recovery assessments received for the prior year. There were \$180,425 unreimbursed costs as of December 31, 2016 and no unreimbursed costs as of December 31, 2015.

4. INCOME TAX STATUS

The Plan is not subject to income taxes under Section 115 of the Internal Revenue Code.

5. RELATED PARTIES; INDUSTRY AFFILIATE

The Plan is administered by the Carpet America Recovery Effort, Inc. (known by the trade name "CARE"). CARE was established in 2002 to represent the carpet industry's effort to support market based carpet recycling solutions. CARE is a not-for-profit, 501(c)(3) organization that was formed to oversee and enable market-based solutions for the recovery and recycling of post-consumer carpet.

To participate in the Plan, manufacturers and retailers must maintain a membership in good standing with CARE. Recyclers who wish to receive disbursements must also maintain a membership in good standing to receive funds.

The primary organizer of CARE was the Carpet and Rug Institute, Inc. (known by the trade name "CRI"). CRI is a 501(c)(6) organization and is the primary trade group of the carpet industry. CRI initiated CARE's organization as the entity to represent, promote the industry's carpet recycling efforts and to manage the industry's recycling programs. CARE was created in dialog with the U.S. EPA, several States, NGOs, and carpet industry members as a result of a Memorandum of Understanding signed January 8, 2002.

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
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5. RELATED PARTIES; INDUSTRY AFFILIATE (continued)

CRI acts as an advocate of the carpet industry and actively works on representing its interest on legislative, regulatory, and judicial issues at the federal, state, and local levels. CRI played an active role in the development of the AB2398 legislation in California, and actively lobbies for the carpet industry in other states considering similar product stewardship or extended producer responsibility (commonly referred to as EPR) legislation.

CARE and CRI share common directors and facilities.

Under AB2398, CARE is allowed to be reimbursed for costs it incurs administering its Carpet Stewardship Plan. Costs incurred directly by AB2398 are paid from AB2398 funds. Shared labor costs of AB2398 and CARE are systematically allocated and periodically settled. These shared labor costs totaled \$469,970 for the year ended December 31, 2016 and \$234,190 for the year ended December 31, 2015.

The Plan included in accounts payable \$67,848 and \$43,499 due to CARE as of December 31, 2016 and 2015 for expenses paid by CARE, but incurred by the Plan.

6. CONCENTRATIONS

The Plan holds AB2398 bank accounts at one bank. Management believes that there is no significant concentration of credit risk due to amounts that exceed federally insured limits being insured by investment portfolio securities of the bank.

The Plan has funds held by an escrow agent. The amount held by the escrow agent at December 31, 2016 was \$83,809 and at December 31, 2015 was \$18,680. These funds likewise are held at one bank and amounts in excess of FDIC limits are secured by investment portfolio securities of the bank.

For the year ended December 31, 2016 and 2015, 10 carpet manufacturers accounted for approximately 90% of the carpet stewardship assessments. These manufacturers also accounted for 90% of accounts receivable at December 31, 2016 and 2015.

For the years ended December 31, 2016 and 2015, there were 20 and 18 recyclers, respectively, that received disbursements from the Plan.

7. COMMITMENTS

In November 2014, CARE on behalf of AB2398 selected the University of Connecticut to receive a competitive grant of \$500,000 for the purpose of identifying value-added uses for

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
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7. COMMITMENTS (continued)

PET (polyester carpet fiber) derived from post-consumer carpet. The final contract was signed January 19, 2015. The grant was completed in January 2017 upon submission of the final reports and presentation to the CARE Board of Directors. The grantee fulfilled all obligations.

CARE began implementation of an approved grant process in early 2016. Three grant categories were defined: Cycle 1A: new or expansion of processing capacity; Cycle 1B: Product Development and Testing; and Cycle 1C: Procurement. The SFOC authorized \$2.98M to support grants according to the following initial allocations: Cycle 1A: \$2,234,500, Cycle 1B \$250,000. Cycle 1C \$500,000. As of December 31, 2016, the following funds have been paid: Cycle 1A: \$601,000. As of December 31, 2016, the following funds have been committed: Cycle 1A: \$1,193,500 and Cycle 1B: \$219,984.

8. COMPLIANCE

In September, CalRecycle notified CARE, that the Plan was out of compliance for 2013, 2014, and 2015 for the following reasons as documented in the Request for Approval (RFA) dated September 20, 2016:

FINDING 1: The recycled output and other Program goals are not showing continuous meaningful improvement.

FINDING 2: Consumers purchasing carpet do not have reasonable access to recycling services in all counties.

FINDING 3: CARE's current Marketing, Education and Outreach (ME&O) efforts have not resulted in increased carpet recycling or diversion reported in the 2015 Annual Report. As CalRecycle previously concluded in its September, 2015 review of the 2014 Annual report, key target audiences such as installers, retailers, and consumers remain unaware of CARE's Carpet Stewardship Program, what recycling services are available, what assessment funds are used for, and what their respective roles are in making the Program successful. It is unclear whether individual ME&O metrics identified by CARE actually lead to continuous meaningful improvement.

FINDING 4: CARE is not responding to market changes in a timely manner with assessment and incentive adjustments, and the assessment may not be set high enough to fund infrastructure development and drive markets for increased recycled output.

In December 2016, CalRecycle disapproved CARE's California Carpet Stewardship Plan 2017-2021 and directed CARE to submit a revised Plan.

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
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8. COMPLIANCE (continued)

CalRecycle in its April 18, 2017 consideration of approval of California Stewardship Revised Plan submitted by CARE requested CalRecycle disapprove the revised February 2017 California Carpet Stewardship Plan 2017-2021

CalRecycle Staff recommended disapproval of the revised 2017 Plan with respect to

meeting the statutory requirements set forth in the following findings:

FINDING 1: The Plan does not provide enough information about the effectiveness of financial incentives and other Program elements to evaluate whether the recycled output goals (24 percent by 2020 and 26 percent by 2021) would actually constitute continuous meaningful improvement, nor how the Plan would achieve these goals.

FINDING 2: The 2017 Plan does not discuss how stakeholder input, especially the recommendations of the newly formed California Council on Carpet Recycling, is evaluated.

FINDING 3: The 2017 Plan does not sufficiently address reasonable consumer access to recycling services in critical population centers in California.

FINDING 4: CARE's proposal to reduce subsidy guarantees to six months does not mitigate the uncertainty and high risk in investment for processors and others to establish and grow critical California infrastructure for long-term carpet recycling.

FINDING 5: In the 2017 Plan, CARE has inappropriately redefined its primary method for measuring progress towards achieving its diversion and recyclability goals (from proportion of all discards to proportion of gross collections). [Finding resolved]

FINDING 6: The 2017 Plan fails to identify or evaluate the education and outreach (E&O) activities most likely to result in increased recycling and diversion.

FINDING 7: The 2017 Plan does not sufficiently address increasing the recycled content in carpet itself (as opposed to secondary products), which could significantly boost end markets for PCC material.

CalRecycle found the California Carpet Stewardship Program out of compliance after review of each annual report for 2013, 2014, and 2015 because the Program was not making continuous meaningful improvement. On September 21, 2016, after the Director found the Program noncompliant based on CARE's 2015 annual report, he directed the Waste Evaluation and Enforcement Branch to commence enforcement evaluation.

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
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9. SUBSEQUENT EVENTS

In March 2017, CARE received legal notice from CalRecycle regarding noncompliance findings regarding AB2398 for 2013, 2014, and 2015 outlining potential fines of \$3,350,000. Further, CalRecycle recommended rejection of revised 2017-2021 Plan. Their analysis suggests all mills, retailers, and distributors will be operating without any approved Plan and therefore subject to a penalty of \$10,000 per day. CARE anticipates that an administrative law judge will hear the issue later this year.

Further, in April 2017 CalRecycle rejected CARE's revised February 2017 California Carpet Stewardship 5-Year Plan for 2017-2021. During the May 16th hearing, the Director of CalRecycle reviewed a draft enforcement plan and announced the following path forward. CARE, and anyone else interested, will have until October 19, 2017 to submit a new plan for consideration. Upon submission, CalRecycle will have a 60-day public comment period rendering their decision on any new Plan at the December public hearing. Thus, CARE expects the currently expired Plan will remain in effect until late 2017.

A new 5-Year Plan for 2017 to 2021 was submitted to CalRecycle by CARE as the Stewardship Organization in October 2016. The Plan was rejected by CalRecycle on December 20, 2016 as documented in the Request or Approval (RFA) and incorporated by reference. As a result, CARE rewrote the new Plan considering the 7 Findings of the RFA. The revised new Plan was resubmitted to CalRecycle in February 2017. CalRecycle once again rejected the revised Plan at a April 18, 2017 hearing. At that time the Director of CalRecycle directed the Enforcement arm to draft an Enforcement Plan for review at the May meeting and possible implementation on or after June 20, 2017. The currently expired Plan was extended while CARE or any other organization prepares to submit another Plan. In the draft Enforcement Plan CARE now has until October 19th to resubmit a Plan. The currently expired Plan will continue to operate under CARE administration while this process takes place. The draft Enforcement action further articulates that there will be no-retroactive fines and future fines will be directed to manufacturers and not retailers or distributors. Manufacturers have until August 15, 2017 to declare in writing to CalRecycle one of three options: 1) stick with CARE, 2) go with another Stewardship Organization, or 3) write their own plan.

Under the currently approved grant program, CARE initiated a micro-grants program (Cycle 1M) to provide small grants to enable and expand collections and recycling. Under Cycle 1M, \$50,000 was approved for grants up to a maximum of \$10,000. Noticing occurred in the spring with proposals due by June 2, 2017.

Management has evaluated events through June 16, 2017, the date on which the financial statements were available to be issued.



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INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

To the Board of Directors of the
Carpet America Recovery Effort, Inc.

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States, the financial statements of The AB2398 California Carpet Stewardship Plan, which comprise the statement of financial position as of December 31, 2016, and the related statements of activities, and cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated June 16, 2017.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered The Carpet America's Recovery Effort, Inc.'s internal control over financial reporting (internal control) of the Plan to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Carpet America Recovery Effort, Inc.'s internal control over the Plan. Accordingly, we do not express an opinion on the effectiveness of The AB2398 California Carpet Stewardship Plan's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis.

A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of the internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether The AB2398 California Carpet Stewardship Plan's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Carpet America Recovery Effort, Inc.'s Response to Findings

The Carpet America Recovery Effort, Inc.'s response to the findings identified in our audit is described in the accompanying schedule of findings and corrective action plan. Carpet America Recovery Effort, Inc.'s response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the organization's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the organization's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Nichols, Cauley & Associates, LLC

Nichols, Cauley & Associates, LLC

Dalton, GA

June 16, 2017

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
SCHEDULE OF FINDINGS AND CORRECTIVE ACTION PLAN
DECEMBER 31, 2016

SUMMARY OF AUDIT RESULTS

Opinion:

Unmodified opinion issued on the financial statements in accordance with auditing standards generally accepted in the United States of America and *Government Auditing Standards* issued by the Comptroller of the United States.

Internal Control Deficiencies:

None reported.

Material Noncompliance:

No instances of compliance or other matters were disclosed.

FINDINGS AND CORRECTIVE ACTION PLANS RELATED TO THE FINANCIAL STATEMENTS WHICH ARE REQUIRED TO BE REPORTED IN ACCORDANCE WITH GENERALLY ACCEPTED GOVERNMENT AUDITING STANDARDS

INTERNAL CONTROL:

Prior Audit Findings:

Finding 2012-004 – Accounts Receivable

Criteria:

Detail of outstanding accounts receivable should be maintained to manage collection efforts and ensure accurate financial statements.

Condition Found:

No detailed accounts receivable reports are maintained to support the balances found in the general ledger. Additional audit procedures had to be performed to gather enough evidence to support our opinion.

Original Recommendation:

CARE should maintain a detailed ledger of amounts reported and amounts and dates of when paid to ensure that the amount reported as accounts receivable at the end of each period is correct.

Status:

Since the Accounting Department of CARE and AB2398 is not privy to the manufacturers self-reported liability to the plan, a detailed accounts receivable ledger is not possible. Accounts receivable at a quarter end are determined by summation of cash received during the three months following the quarter end. The audit procedures employed did not result in the discovery of any material misstatement of accounts receivable or a material difference between cash receipts and the manufacturers self-reported liability. Until the Accounting Department of CARE

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
SCHEDULE OF FINDINGS AND CORRECTIVE ACTION PLAN
DECEMBER 31, 2016

and AB2398 is made privy to the manufacturers data or the agreed upon procedures performed by the independent accountant are expanded to include the vouching of individual receipts from the mills, we do not believe further improvement possible.

Per CalRecycle's request, this finding was revisited in the 2015 audit although the prior auditor found there was no further improvement possible due to the structure of the Plan. During 2016 via correspondence with CalRecycle, CalRecycle agreed no further improvement was possible and the work around controls via the HA&W (Aprio) AUPs and cash controls were sufficient to eliminate this finding.

Finding 2013-001

Criteria:

Government Auditing Standards state that "inadequate controls for the safeguarding of assets" is a control deficiency.

Condition Found:

Upon review of the AB2398 system of revenue reporting by manufacturers and payment requests by recyclers, the following conditions were found:

On January 4, 2013, the sustainable funding oversight committee of CARE reduced the reporting window for mills and recyclers from 60 days plus a 15 day grace period to 30 days after quarter end with no grace period, effective with the Q1 2013 data, in order to shorten the payout cycle to the recyclers.

However, the timetable for the application of the plans agreed upon procedures have not been shortened and delivery of the agreed upon procedure reports for the 2013 data are seven and eight months after the quarterly data is available.

This makes it difficult for the management of the plan to timely respond to issues discovered by the agreed upon procedures.

Original Recommendation:

1. The timetable for the completion of the appropriate Agreed Upon Procedures (AUP) needs to be compressed to ninety days. Reporting of manufacturers and their remittance to the Plan is to occur within 30 days after each calendar quarter end. Recyclers, likewise, are to report and request payment within 30 days of the end of the calendar quarter. The agreed upon procedures need to take place within the 90 day window between reporting deadlines to be effective and reduce the chance for an excess payment to be made or recovered. Likewise an error in revenue recognition from the mills would be reduced.

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
SCHEDULE OF FINDINGS AND CORRECTIVE ACTION PLAN
DECEMBER 31, 2016

Status:

For 2016, we tested four mill AUPs and five recycler AUPs completed for 2016. One of the mill AUPs is still in progress for the fourth quarter of 2016 due to a delayed response from the mill. Appropriate follow up actions have been completed by Aprio and CARE to ensure a timely completion of the AUPs. The AUPs had been completed within the requisite time frame required. We find this issue to be cleared.

Finding 2013-002

Criteria:

Government Auditing Standards state that “inadequate controls for the safeguarding of assets” is a control deficiency.

Condition Found:

CARE management does not maintain a registry of, nor an easy access library of, the agreed upon procedure reports performed by the independent accountant. Likewise, an easy access library of the minutes of the SFOC, SPC, and meetings with CalRecycle are not maintained in a centralized repository. These reports and minutes are central to the system of internal control of the Plan and need to be maintained in one central location.

Original Recommendation:

1. We recommend that hard copies of all agreed upon procedure reports be maintained in a locked, confidential, fireproof cabinet in the CARE offices for access by management and auditors.
2. We recommend that hard copies of all minutes be maintained in the same cabinet.
3. Further, we recommend CARE’s copy of the AB2398 registration, annual filings, the approved stewardship plan, etc., likewise, be maintained in this repository.

The above documents are key to the existence and internal control of CARE and CARE’s role as steward over AB2398.

Status:

In 2016 CARE added a Financial Operations Director and an Administrative Assistant. During the course of our audit, we found that the Plan records were much easier to locate. We did not have to wait for any documents to be hunted down which is a big improvement from previous years. The records are better labeled. The additional staff has alleviated some of the burden. We consider this finding to be cleared.

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
SCHEDULE OF FINDINGS AND CORRECTIVE ACTION PLAN
DECEMBER 31, 2016

Finding 2014-001

Criteria:

Government Auditing Standards state that “inadequate controls for the safeguarding of assets” is a control deficiency.

Condition Found:

In order to receive funds from the Plan, the recipient must submit a signed request for payment within 30 days of the last day of the quarterly reporting period (page 36 of the Plan document). Upon review of the AB2398 disbursement process, there were four instances where the request for release of funds authorization signature pages from recyclers/processors could not be located. Subsequently, two of said releases were found, but two had to be obtained from the recycler.

Original Recommendation:

We recommend that a checklist be created for each quarter to verify that all necessary documents are received timely from the recyclers/processors prior to issuing the disbursements and that the documents are properly filed within the system to allow for easy retrieval.

Status:

During the 2016 audit, all signature pages requested were provided in a timely manner. We find this issue to be cleared.

Finding 2015-001

Criteria:

Government Auditing Standards state that “inadequate controls for the safeguarding of assets” is a control deficiency.

Condition Found:

CARE operations staff does not always effectively communicate with the financial staff. The financial staff is often unaware of what is occurring within the program. In addition, the CARE CFO is not receiving all HA&W reports and since she is part of the disbursement procedure, she should be aware of any concerns or exceptions to the recyclers.

Original Recommendation:

We recommend that the financial and operations staff meet quarterly to exchange pertinent information in the management of the program. It is imperative that any concerns be shared among all in management.

THE AB2398 CALIFORNIA CARPET STEWARDSHIP PLAN
SCHEDULE OF FINDINGS AND CORRECTIVE ACTION PLAN
DECEMBER 31, 2016

Status:

The Financial Director attends all meeting and keeps all parties informed of any changes or developments. There is much improved communication internally and with external parties. We find this issue to be cleared.

Finding 2015-002

Criteria:

Government Auditing Standards state that “inadequate controls for the safeguarding of assets” is a control deficiency.

Condition Found:

The Collector/Sorter Entrepreneurs (CSEs) began receiving subsidies during the course of 2015 and are required to submit data, but have not been required to submit attestation letters. Per the Plan guidelines, attestation letters are a requirement for the disbursement of funds.

Original Recommendation:

We recommend that CARE include the requirement of attestation letters for all processors receiving subsidies and incentives.

Status:

We tested various months after May 2016, and found that all requested attestation letters for the CSEs were kept on file. We find this issue to be cleared.



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INDEPENDENT AUDITOR'S REPORT ON STATE COMPLIANCE REQUIREMENTS

Board of Directors of the
Carpet America Recovery Effort, Inc.
PO Box 2048
Dalton, GA 30722-2048

Compliance

We have audited CARE's compliance with the requirements specified in the State of California's Code of Regulation, Title 14, Division 7, Chapter 11, Article 1 applicable to CARE's statutory requirements identified below for the year ended December 31, 2016.

We have also audited the basic financial statements of Carpet America Recovery Effort, Inc. (CARE) as of and for the year ended December 31, 2016 and have issued our report thereon dated June 16, 2017.

Both audits were conducted in accordance with auditing standards generally accepted in the United States of America and the standards applicable to audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States.

Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and the significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

CARE's management is responsible for CARE's compliance with laws and regulations. In connection with our audits referred to above, we selected and tested transactions and records to determine CARE's compliance with state laws and regulations applicable to CARE's program.

Auditor's Responsibility

Our responsibility is to express an opinion on CARE's compliance based on our audit. We conducted our compliance audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States; and the State of California's Code of Regulation, Title 14, Division 7, Chapter 11, Article 1 applicable to CARE's statutory requirements. Those standards and the State of California's Code of Regulations require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the compliance requirements referred to above that could have a material effect on the statutory requirements listed below occurred. An audit included examining, on a test basis, evidence about CARE's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination of CARE's compliance with those requirements.

In connection with the audit referred to above, we selected and tested transactions and records to determine CARE's compliance with state laws and regulations including, but not limited to, the following applicable items:

Description List each compliance requirement		Audit Procedures Performed (Yes/No)	Complied (Yes/No)
Performance Goals and Activities. Measurement methods accurately identify:			
a.	Amount of California carpet that is diverted from landfills	Yes	Yes
b.	Amount of California carpet that is processed into a new commodity	Yes	Yes
c.	That California carpet is managed in a manner consistent with the state's waste management hierarchy.	Yes	Yes
d.	Amount of California carpet discarded each year (estimated using a formula based on sales). Assumptions used in the formula are appropriate for California.	Yes	Yes
Financing Mechanisms			
a.	Assessments are paid to CARE on all carpet sold in the state of California at the rate indicated in the Plan (i.e., 5 or 10 cents per sq yd)	Yes	Yes

b.	The assessments collected for the AB2398 program are only spent on the AB2398 program.	Yes	Yes
c.	The payments are accurately presented by categories found in the Regulations, Section 18944 (7). Annual Report Compliance Criteria, Financing Mechanism.	Yes	Yes
d.	The annual report accurately presents information.	Yes	Yes
Program Performance Measurement			
a.	Applicants applying for incentive payments submit documentation as required in the Plan (and Agreed Upon Procedures) that are in place at the time documents are submitted.	Yes	Yes
b.	CARE is tracking information needed to include in Annual Report per regulations Section 18944.	Yes	Yes
c.	CARE's practices support a level playing field among those requesting AB2398 funds.	Yes	Yes
d.	CARE has a method to determine the effectiveness of educational and outreach activities that is appropriate for use in California.	Yes	Yes

Opinion

In our opinion, CARE complied, in all material respects, with the compliance requirements referred to above that are applicable to the statutory requirements listed above for the year ended December 31, 2016.

This report is intended solely for the information of the Board of Directors of the Carpet America Recovery Effort, Inc. and CalRecycle and is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

Richards, Cauley + Associates, LLC

Dalton, GA
June 27, 2017

10.11 Definitions

Definitions presented below are included within the AB 2398 statute, and/or in the Product Stewardship for Carpet Regulations (November, 2011). Revisions presented in the California Carpet Stewardship Plan 2011-2016 (2011-2016 Plan) or 2015 annual report are marked with an asterisk (*). Additional revisions presented in this report are underlined.

Capacity: Theoretical maximum volume of carpet discards able to be processed by participating Tier-1 processors in a given year, based on self-reported estimates and/or permitted capacity figures. In line with CalRecycle [FacIT](#) definitions, Capacity is generally presented in tons per year (TPY). Both pounds per year and TPY are presented in this report.

Carpet: A manufactured article that is used in commercial or residential flooring applications as a decorative or functional feature and that is primarily constructed of a top visible surface of synthetic or natural face fibers or yarns or tufts attached to a backing system derived from synthetic or natural materials.

- “Carpet” includes, but is not limited to, a commercial or a residential broadloom carpet or modular carpet tiles.
- “Carpet” does not include a rug, pad, cushion, or underlayment used in conjunction with, or separately from, a carpet.

Carpet America Recovery Effort (CARE): A nationwide, 501(c)(3) non-profit organization whose focus is on post-consumer carpet stewardship.

Carpet as Alternative Fuel (CAAF*): Fuel that has been produced from source-separated and sorted post-consumer carpet and processed, including (1) extraction of components for recycling if at all possible and (2) size reduction, shredding, and/or blending with coal fines, etc. CAAF is not a type of recycling, but it is a type of diversion for purposes of this article. CAAF is an alternative fuel source to other fuel sources such as coal, natural gas, and fuel oil.

Carpet-Derived Aggregate (CDA): A potential utilization of recycled output as an alternative to heavy rock and soil for use in geotextiles, road construction or similar civil engineering application; similar to Tire Derived Aggregate (TDA). Examples might include lightweight wall back fill, vibration attenuation, embankment repair, etc.

Carpet Industry: The universe of participants involved in the production of carpet, including carpet mills, fiber manufacturers, material suppliers, etc. It includes, but is not limited to, members of the Carpet and Rug Institute (CRI).

Carpet Mill: A primary producer of carpet, carpet tiles, or related products covered under the Plan. Also referred to as a *carpet manufacturer*.

Cement Kiln: Cement production facility that may use CAAF as a source of energy and/or as an additive for cement production.

Collected: Gross collected pounds of California PCC (total includes material that may eventually be sent to landfill). Also referred to as *Gross Collected*.

Collection: Any method of consolidating and temporarily storing recovered commercial and/or residential carpet.

Collector/Sorter Entrepreneur (CSE): A business that provides carpet recycling collection services for retailers, disposal sites or other sites. CSEs sort received PCC by material type for third-party reuse, or wholesale to Tier-1 processors for recycling. CSEs do not convert material into recycled output.

Demolition: Represents the teardown of a building (one-time carpet removal). There is no estimate of percentage of flooring covered by carpet.

Discards: Carpet that has completed its lifecycle as a consumer item or is no longer used for its manufactured purpose. Also referred to as *post-consumer carpet materials*.

Disposal Diversion: Carpet removed from the waste stream that was destined for the landfill or incineration for the purpose of reuse, recycling, CAAF, kiln or waste-to-energy.

Disposal Facility: Facilities that are licensed and permitted to provide final disposal for the specific wastes they accept, including waste-to-energy, incineration, and landfill.

Diversion (Net): Estimated total PCC removed from California landfills for reuse, recycle, CAAF, kiln or WTE. It is calculated as the difference of gross collected pounds minus PCC and process waste pounds that ultimately goes to landfill from Tier-1 processors or CSEs.

Diversion (Reported): The sum of reported PCC removed from California landfills. It is calculated as the sum of reported pounds of reuse + recycled output (Type 1 + Type 2+ Calcium Carbonate) + CAAF + Kiln + Export + WTE. Reported Diversion in Figure 1 (Section 2.4) is presented with and without the inclusion of additive carpet cushion diverted as a co-benefit of carpet recycling.

Education/Communication Costs: Refers to expenses incurred in support of Marketing, Education and Outreach (ME&O) efforts conducted under the 2011-2016 Plan. Includes the cost of market research and promotion, on-the-ground education and outreach support, communications, market research, collateral and materials development and related expenses.

End-of-life (EOL) Costs*: Program cost associated with the management of carpet discards from the point when a product is discarded by the consumer or the end of the useful life of the product, whichever occurs first. Costs may include subsidies, incentives or other expenditures related to reuse, recycling, incineration for energy recovery, landfilling and other forms of carpet disposition in line with Program goals. It also includes storage and transportation for the collection drop-off site program.

ESJPA: Environmental Services Joint Power Authority.

Entrepreneur: For the purposes of this report, it is defined as an individual or privately held company that actively, collects, sorts, processes, or manufactures products made from post-consumer carpet. It does not refer to a carpet manufacturer.

Filler: Materials such as calcium carbonate, etc., used in the production of carpet backing.

Governance Costs: Includes costs charged by CalRecycle for regulatory oversight of the Program; it is limited to 5% of total Program implementation costs.

Gross Collection (GC): Actual pounds of PCC removed from waste stream for reuse, recycle, CAAF, kiln, or WTE, as reported to CARE by recyclers, prior to processing. This also includes unrecyclable PCC or carpet processing waste that may eventually be sent to landfill. The terms *Recovered* and *Collected* were previously used to describe *Gross Collected*.

Gross Collection Conversion Rate: The ratio of gross collections converted into recycled output, expressed as a percentage of gross collections; also referred to as *yield*.

Implementation Costs: Includes total expenses associated with Program implementation, as the sum of EOL subsidies (incentives) costs, education/communication costs and program administration costs.

Incineration: Complete burning of material to ashes, with no energy recovery, to reduce waste volume.

Input: The post-consumer carpet that is collected, sorted and readied for processing.

Landfilling: Landfilling includes the placement of post-consumer carpet and/or the residuals from a post-consumer carpet management method into a landfill disposal facility.

Manufacturer: A manufacturer of secondary products made with post-consumer carpet content. Manufacturers receive finished (Type 1) recycled output from Tier-1 processors and utilize this material in the production of finished secondary products. At this time, manufacturers are only eligible for subsidy payments if they use non-nylon Type 1 output. CARE reserves the option to extend the manufacturer subsidy system to nylon based Type 1 output if market dynamics justify. In this report, secondary manufacturers are referred to as Tier-2 manufacturers.

Marketing, Education & Outreach (ME&O): Communications, education, and/or outreach activities related to Program promotion, technical assistance or stakeholder support for the purpose of increasing Program adoption, impact and/or effectiveness.

Memorandum of Understanding (MOU) for Carpet Stewardship: An agreement entered into by multiple stakeholders, including carpet industry, entrepreneurs, government entities and non- governmental organizations.

Nongovernmental Entities (NGOs): Nongovernmental entities.

Post-Consumer Carpet Materials: Carpet that has completed its lifecycle as a consumer item or is no longer used for its manufactured purpose. Also referred to as *discards*.

Post-Industrial/Pre-Consumer Carpet Material: Carpet materials generated in manufacturing and conversion processes, including, but not limited to, manufacturing scrap and trimmings/cuttings.

Processing: Preparing carpet material for reuse, recycling, CAAF, WTE, or disposal. Is meant to refer to some form of mechanical or chemical processing beyond cutting flats, sorting or baling whole carpet

Processor: Qualified recipient participating under the Plan, that use industry-recognized processes such as shredding, grinding, sheering, depolymerization, etc., to convert discarded whole carpet into finished (Type 1 or Type 2) recycled output, ready to be utilized as an input material for secondary products. In this report, processors are referred to as Tier-1 processors. Some processors may also function as collector/sorter entrepreneurs or Tier-2 manufacturers.

Program Administrative Costs: Includes the following Program expenses: accounting, legal services, CARE facilities and operational expenses, staffing/contractor expenses, professional services and related expenses.

RCRC: Rural County Representatives of California, a 35-member county service organization that champions policies on behalf of California's rural counties.

Recovered: Gross collected pounds of California PCC (this includes unrecyclable PCC carpet or carpet processing waste that may eventually be sent to landfill). Also referred to as *Gross Collected*.

Recycled Content: Also known as recovered material content, it is the percentage of material, by weight, a product is made from that has been recovered from consumers in the municipal solid waste stream (post-consumer content) plus any industrial materials salvaged for reuse (pre- consumer/post- industrial content).

- **Post-Consumer Recycled Carpet Content (PCRCC):** The amount or percent of carpet, by weight, that is no longer used for or has served its manufactured purpose, that is incorporated into the manufacturing process of the same or a different product.
- **Post-Industrial/Pre-Consumer Recycled Carpet Content:** The amount or percent of carpet material, by weight, generated by manufacturers or product converters, such as trimming, overruns and products returned to the Carpet Mills that are incorporated back into the manufacturing process of the same or a different product.

Recycled Output (RO): The material that results from the industry-recognized processing (shredding, shearing, hammer milling, depolymerization, etc.) of PCC from a Tier-1 processor. Examples of output include: fiber, shredded carpet tile, depolymerized chemical components, calcium carbonate, carpet filler, etc. The Program currently distinguishes between two types of material:

- **Type 1 Recycled Output Material:** Output of the materials with the most benefits to manufacturers of finished products. Type 1 recycled output materials must meet requirements set by the CARE SFOC. This includes maximum allowable ash content requirements, which are presently set at 25% or less and verified with monthly ash testing in line with CARE approved testing protocols. Examples of Type 1 recycled output materials include PCC fiber, PCC backing, engineered resins, and material for carpet cushion.
- **Type 2 Recycled Output Material:** Output of the materials with benefit to manufacturers of finished products, but a lower value than Type 1 recycled output materials. Type 2 recycled output materials exceed 25% ash content in line with CARE approved testing protocols. Examples of Type 2 recycled output materials include carpet filler and non-functional filler.

Recycling: Transforming or remanufacturing discarded carpet materials into usable or marketable materials, rather than for landfill disposal, incineration, WTE, CAAF, or reuse.

Recycling Rate: The proportion of carpet discards converted into recycled output, expressed as a percentage of carpet discards. The Program's recycling rate goal is 16% by 2016 and 24% by 2020.

Reuse: Refurbishing and donating/selling recovered carpet back into the market for its original intended use. The reuse of recovered carpet retains the original purpose and performance characteristics of the carpet.

Rug: A loose laid (not installed or attached at wall base) soft floor covering manufactured from natural or synthetic fiber, including carpet cut into room or area dimensions that is not intended to cover the entire floor.

Rural County: California counties that meet the CalRecycle definition of rural: "A rural county is defined as a county which disposes of less than 200,000 tons of waste annually." (PRC 40183-4)

SFOC: Sustainable Fund Oversight Committee of CARE.

Sorting: The method used for segregating collected carpet into the various backing types (PVC, SBR Latex, etc.) and/or fiber types (e.g., Nylon 6, Nylon 6,6, polypropylene and polyester).

Source Reduction: The result of using less product or material in manufacturing and use of carpet, and/or reducing the amount of discarded carpet generated.

Source Separation: The process by which carpet is separated/segregated from all other materials at the end of its useful life (or when discarded).

SPC: Stewardship Planning Committee of CARE.

Throughput: Consistent with the [FacIT](#) system definition, throughput means the total amount of material actually received at a facility, in tons per year for a specific activity in a given year, equal to gross collections. Throughput is presented in combination with a summary of final disposition data for gross collected discards managed by participating Tier-2 manufacturers and collector/sorter entrepreneurs.

Waste-to-Energy: Process of recovering thermal energy from solid waste through combustion.

Yield: The ratio of gross collections converted into recycled output, expressed as a percentage of gross collections; also referred to as *gross collection conversion rate*.

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